

FOREWORD

This document provides the first volume of EPA's responses to public comments on EPA's Proposed *National Emission Standards for Hazardous Air Pollutants for Area Source Industrial Commercial Institutional Boilers*. EPA published a Notice of Proposed Rulemaking in the Federal Register on June 4, 2010 at 75 FR 31895. EPA received comments on this proposed rule via mail, e-mail, facsimile, and at three public hearings held in Washington, DC, Houston, Texas, and Los Angeles, California in June 2010. Copies of all comments submitted and transcripts for the public hearings are available at the EPA Docket Center Public Reading Room. Comments letters and transcripts of the public hearings are also available electronically through <http://www.regulations.gov> by searching Docket ID *EPA-HQ-OAR-2006-0790*.

Due to the size and scope of this rulemaking, EPA paraphrased a limited amount of major comment themes in the preamble of the final rule. This document contains the verbatim comments provided by each commenter extracted from the original letter or public hearing transcript. The document has been broken up into three sections to meet the electronic document size constraints of the Docket.

For each comment, the name and affiliation of the commenter, the document control number (DCN) assigned to the comment letter, and the number of the comment excerpt is provided. *Table 1* of this document provides a complete listing of the DCN and affiliations included in this document. In some cases the same comment excerpt was submitted by two or more commenters either by submittal of a form letter prepared by an organization or by the commenter incorporating by reference the comments in another comment letter. Rather than repeat these comment excerpts for each commenter, EPA has listed the comment excerpt only once and provided a list of all the commenters who submitted the same form letter or otherwise incorporated the comments by reference in *Tables 2 and 3* at the end of this document.

Several of EPA's responses to comments are provided immediately following each comment excerpt. However, in instances where several commenters raised similar or related issues, EPA has grouped these comments together and provided a single response after the first comment excerpt in the group and referenced this response in the other comment excerpts. In some cases, EPA provided responses to specific comments or groups of similar comments in the Preamble to the final rulemaking. Rather than repeating those responses in this document, EPA has referenced the Preamble or the appropriate technical support document for a description of the analysis included in the final rule. In other cases EPA has provided a general response at the beginning of a section of this document which responds to the comments within the section.

Parallel with this rulemaking effort are three separate, but related rulemakings that may be of interest to stakeholders. These three rules are: *National Emission Standards for Hazardous Air Pollutants for Major Source Industrial/Commercial/Institutional Boilers and Process Heaters* (Docket ID: EPA-HQ-OAR-2002-0058); *Identification of Non-Hazardous Secondary Materials That Are Solid Waste* (Docket ID: EPA-HQ-RCRA-2008-0329); and *Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units* (Docket ID: EPA-HQ-OAR-2003-0119).

Given the identical proposal dates, and the related nature of these other rules, many commenters submitted comments to this rulemaking docket that were specific to one of these related rulemakings. Some commenters submitted a single DCN with comments on all four rules while others submitted a separate DCN specific to each rule. Many commenters submitted identical comments to all of these dockets. In order to reduce duplicative comments, this document flags comments associated with any of the above three related rulemakings as out-of-scope comments for this response to comment document. To the extent that the commenter submitted these comments to the appropriate rulemaking document, responses have been developed in the response to comment documents for each of these related rulemakings. For this reason, EPA encourages the public to read the other response to comment documents prepared for these three other rulemakings as they may contain topics relevant to these other rulemakings.

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Out of Scope Comments on Other Rules

Out of Scope: Non-Hazardous Solid Waste Definition

Commenter Name: Carl Johnson

Commenter Affiliation: Southern Pressure Treaters' Association

Document Control Number: EPA-HQ-OAR-2006-0790-0870.1

Comment Excerpt Number: 2

Comment: All forms of biomass should be considered by EPA to be fuels and not waste. Many of our members burn clean biomass in the form of bark, sawdust, shavings and trim generated during their peeling and manufacturing operations at the wood preserving facility. This biomass is environmentally friendly fuel in that it produces no net addition of CO₂ since the CO₂ emitted is equal to the CO₂ removed from the atmosphere in the creation of wood fiber. Also woody biomass is a very clean fuel with very low levels of mercury, chlorine, and other non-mercury metallic HAPS.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 3

Comment: EPA's proposed definition of solid waste, however, is irresponsible and seriously endangers public health. By defining many industrial wastes as "fuel," boilers and process heaters at many area source facilities will be permitted to burn such wastes without any control, monitoring, or reporting requirements.

Lisa Jackson has repeatedly stated environmental justice issues are a core concern of her mission as administrator. In order to walk the walk, Lisa Jackson and EPA must control toxic emissions from facilities that burn any industrial wastes, regardless of whether the purpose is disposal or energy recovery. It is well within your authority to do so.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0396
Comment Excerpt Number: 3

Comment: In the non-hazardous secondary material rule, EPA should define secondary material, biomass materials like resonated trim, urban wood, pulp paper, and wastewater residuals as fuels and promote their use, which displace fossil fuels as consistent with the President's call for greater use of renewable fuels.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0397
Comment Excerpt Number: 5

Comment: Our oil-fired boiler is used as an auxiliary or intermittent back-up boiler. It runs on reprocessed fuel oil also known as fire coal. And this oil is processed to meet Washington State designated specifications. Natural gas is not available in our area. The cost of the additional pollution control equipment is exorbitant when compared to the amount of pollutants that would be collected from this unit. This may lead us, ironically, to shut down our most modern boiler, run our other units harder and/or curtail our production.

The trickle-down effect includes having the fuel supplier having to decide whether or not it's worth it to continue processing the RFO if, indeed, it loses its biggest customer. This product was developed in conjunction with the state's need to provide a beneficial use for the oil and to get the used oil out of the storm drains and landfills around the state. This certainly would be an unfortunate unintended consequence from these rules.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 6

Comment: ACC believes that EPA should encourage as much as possible the burning of fuel as non-hazardous secondary materials as this will preserve virgin materials and result in greater diversity of fuel sources.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 8

Comment: Today I'll speak on behalf of these organizations concerning the Environmental Protection Agency's recently proposed rule change governing solid waste-derived fuels. Some may find it curious that a California used-oil generator would have such an interest in this ruling considering the fact that our waste streams are already considered hazardous wastes.

Oil Changer, and its sister company, North American Lubricants, have been working with legislators for the past five years to champion the highest and best use of lubricating oil as defined by the California Integrated Waste Management Board. A 2008 study commissioned by the Board and conducted by Lawrence Livermore National Laboratory concluded the best use of recycling used oil is as a lubricating oil.

We're concerned about the misconception that harmful constituents are pervasive in used oil. Over the past five years, Oil Changer has recycled over 2.3 million gallons of used oil in this state. And that's been done over the course of servicing hundreds of thousands of vehicles. There hasn't been one instance of having halogens greater than 4,000 parts per million, flashpoints of less than 100 degrees Fahrenheit, or any other contamination that would justify classification as off-spec oil.

Findings from the National Oil Recyclers Association, also known as NORA, agree with our real world experiences. NORA test data is in disagreement with some of the results cited in the Material Characterization Paper on Used Oil. As part of their formal comments, NORA will submit the data accumulated over the past years from hundreds of thousands of generators.

As we move forward in this process, it's important to keep in mind past regulatory milestones. In 1980, 1984, and 1986, Congress asked the EPA to develop regulations that protect human health and the environment while encouraging responsible used oil recycling. Congress was aware that overbearing regulations would adversely affect the market and diminish the likelihood of used oil being handled properly.

The result has been a system that has enabled the collection and management of a valuable commodity. The history of used oil regulation illustrates how market forces can work in concert with reasonable regulations.

Oil Changer believes the EPA's proposed rule for on-specification used oil is correct. Because it is not abandoned or discarded and has a valid use, it should not be classified as a solid waste. However, the same can be said about off-specification used oil so we must disagree with this point. Off-spec oil is a traditional fuel that is used interchangeably with on-spec oil. Industrial users create a demand for both types of oil since there is no difference in their ability to produce heat.

Thanks to a strong market for off-specification oil, it is generally not abandoned, discarded, or otherwise wasted. Approximately 750 industrial furnaces and boilers throughout this country create this demand. If off-spec oil was considered a solid waste requiring incineration, the value of the fuel would plummet.

Generators would see their beneficial byproduct transformed into a liability that must be disposed of in a Section 129 solid waste incinerator. These incinerators are fewer and much farther between than the furnaces and boilers that currently rely on off-specification oil. Longer distances result in higher costs for generators, pollution resulting from transportation, and the increased possibility of spill and mismanagement. Devaluing a valuable and finite resource has many negative repercussions. Will the proposed rule change result in less pollution released into the atmosphere? Consider these facts before arriving at a conclusion. Does burning off-spec oil in an incinerator with Section 129 permits result in fewer emissions? We would like to see these questions investigated and quantified further.

It should also be noted that 750 industrial furnaces and boilers mentioned in the EPA's Materials Characterization Paper are regulated by the Clean Air Act. As a supporter of recycling oil, we must emphasize Exhibit of the American Materials Characterization Paper. Here it is stated that the principal benefits of using used oil as a fuel is the savings in upstream pollution from harmful air pollutants.

By collecting and reusing recycled oil as fuel, industry prevents pollution that would otherwise have resulted from producing the same amount of virgin product. Such a change would drastically alter the business model of companies dependent on the current used oil marketplace. The repercussions of such a change must be weighed against proven benefits to the environment.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 9

Comment: The Central Contra Costa Sanitary District, referred to as CCCSD, provides wastewater collection and secondary wastewater treatment for approximately 450,000 people at a facility located in Martinez, California. Sewage sludge generated is conveyed directly to a multiple-hearth furnace, which produces 150 psi steam that drives a turbine/blower supplying air to the secondary process. This helps reduce our need for natural gas. The resulting ash product is combined with other materials to produce a commercially available soil amendment product. Sewage sludge incineration is already regulated under 40 CFR 503, and promulgated under the Clean Water Act back in the early '90's. Human health risk criteria were used to set the maximum sewage sludge concentration for arsenic, cadmium, chromium, lead, and nickel. In addition, 40 CFR 503 includes flue gas concentration limits for carbon monoxide or total hydrocarbons as surrogate indicators of organic compound destruction. There are current emission limits for beryllium and mercury under existing New Emission Standards for Hazardous Air Pollutants and New Source Performance Standards for sewage sludge incinerators.

The regulation of sewage sludge as a solid waste under Section 129 is not necessary. CCCSD maintains that our sewage sludge meets the legitimacy requirements as a secondary fuel.

First, CCCSD sewage sludge is handled as a highly valuable source of fuel. The sewage sludge is continuously dewatered and directly injected into the multiple-hearth furnace producing ash and steam.

Second, CCCSD generates million Btu's per hour of 150 psi steam from combusting 28 million Btu's per hour sewage sludge and 6.7 million Btu's per hour of landfill gas. This saves CCCSD approximately \$650,000 per year in energy costs. That's with natural gas at \$5.80 per decatherm and clearly shows that sewage sludge has value as a fuel.

Third, CCCSD sewage sludge has contaminants levels similar to the coal referred to in Notice of Proposed Rule Making. I want to emphasize "similar to coal." If CCCSD abandons incineration in favor of going to a landfill, the cost for sewage sludge handling will increase from \$5 million to \$10 million per year. This is mainly due to hauling costs and tipping fees. This does not include any added air pollution from mobile emissions from the haulers. Future costs may be even higher because of new greenhouse gas fees for fleet vehicles and landfill limitations required by California's AB 939 rule, which also places several restrictions on landfill use.

In summary, sewage sludge from CCCSD is already appropriately regulated under 40 CFR 503, NESHAP, and NSPS, so regulation as a solid waste under Section 129 is not warranted.

Next, CCCSD sewage sludge meets the criteria to be a legitimate secondary fuel and not a solid waste, even if the heat recovery is done with a separate boiler unit; i.e., ducting between the incinerator and our heat recovery boiler.

Finally, the high cost alternative going to landfill will add another financial burden to already stressed public agencies with no tangible benefit to human health or the environment. The CCCSD strongly urges USEPA to find that sewage sludge is not a solid waste and should be regulated as a legitimate secondary fuel under Section 112 of the Clean Air Act.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 12

Comment: The focus of my talk will be on the identification of secondary non-hazardous solid waste.

MR. WAYLAND: Could you get a little closer to the microphone? I'm not sure everybody in the back may be able to hear.

MR. WILSON: Okay.

The rule, as proposed, could greatly narrow the scope of secondary materials currently in use as alternative fuels and ingredients during cement processing, or, at the very least, subject those facilities using secondary materials to Clean Air Act Section 129 incinerator emission standards. Cement plants, like many industrial facilities, are not incinerators.

Moreover, cement plants are already regulated under stringent emission standards pursuant to Clean Air Act Section 112 authorities, which when developed were crafted to reflect the industry's long-term practice of using secondary materials.

Among common alternative ingredient materials used by many cement manufacturing facilities are foundry sand, mill scale, and steel furnace slag. Among alternative fuels, scrap tires provide the best example due to the industry's long-standing use of this secondary material. In the United States where more than 300 million scrap tires are generated annually, Portland cement plants use more than 50 million as fuel and ingredient, thereby diverting those materials from landfills.

Furthermore, almost 700,000 tons of scrap tires were consumed in cement kilns in the United States in 2007. Of those, whole tires comprised approximately 75 percent versus 25 percent for shredded tires.

The environmental benefits of utilizing scrap tires as a supplemental fuel in the Portland cement process are multifold. When whole tires are combusted in cement kilns, the steel belting becomes a component of the clinker, an intermediate product. This steel belting may replace some or all of the iron required by the manufacturing process. Pound for pound, tires have more fuel value than coal, and the use of tires as fuel can actually reduce certain emissions.

EPA states that tire-derived fuel contains about the same amount of energy as oil and 25 percent more energy than coal. This means that each ton of tire-derived fuel used by a Portland cement plant has the potential to replace 1.25 tons of coal. The United States Department of Energy has estimated that the combustion of tire-derived fuel produces less CO₂ per unit of energy than coal. Furthermore, when compared to many U.S. coals, the tire-derived fuel results in lower NO_x emissions. This advantage is also acknowledged by EPA.

EPA has also indicated that the proposed rule could lead to more tires being dumped, rather than incinerated or burned as fuel. Indeed, the use of byproducts such as tire-derived fuel conserves natural resources used for fuel and raw materials and is a practice widespread in the cement industry and other manufacturing sectors here and around the world.

The EPA solid waste proposal, if implemented, would stigmatize the practice of reusing byproducts, jeopardizing their future use and contravene the very intent of RCRA. Moreover, the rule would have the effect of classifying cement plants as solid waste incinerators, as I mentioned previously.

We do not believe that Congress intended for Clean Air Act Section 129 to be used for regulating industrial manufacturing facilities. Congress developed Section 112 for this purpose. Incinerators are not for production vessels. They're designed primarily to destroy waste. Therefore, it would be misguided and damaging to the cement sector if EPA were to group cement kilns and similar fuel-burning systems under the regulatory requirements designed for incineration of waste material. Our industry recovers useful energy and utilizes ingredients that would otherwise be mined.

We believe the proposed rule is a significant step back from what the Agency proposed in January ANPRM with regard to the following: the concept of discard; the narrow application of the term processing; uncertainties surrounding the non-waste determination petition process; establishment of certain legitimacy criteria for both fuels and ingredients; and the alternative approach.

All of these areas, among others, represent issues that jeopardize the future use of non-hazardous secondary materials as fuels and ingredients. Our written comments will provide more detail in support of the industry's views and concerns on these matters.

In conclusion, we request that EPA construct a final rule that reflects the realities of the industry while encouraging existing beneficial use practices that reduce emissions and improve energy efficiency. These environmentally beneficial practices have been employed in the cement industry for many years and in many countries around the world and should be enhanced rather than discouraged.

Diverting potential secondary materials from fuels — excuse me, from landfills is a major benefit of the alternative use practices employed by the cement industry today and should not be stigmatized by enforcement under Clean Air Act Section 129. The cement industry is appropriately regulated in — under Clean Air Act Section 112, and we believe the rule, as proposed, provides no environmental or economic gain to the industry or general public. Failure to remedy the flaws in the proposed rule will do material harm to our industry and its employees and will worsen the world's most intractable environmental challenges.

Our reading and understanding of the non-waste -- non-waste determination petition process as described in the proposed rule, we feel there are a lot of uncertainties associated with it. And like I said, we'll go into a lot of those in detail, but it -- you know, there are questions about the frequency of how this petition process may be applied. I mean, how often would a company have to undergo such a -- you know, such a rigorous requirement? You know, how many -- how do vendors play into this thing?

We just feel that there are a lot of questions associated with it that have not been addressed in the proposed rule; and for that reason -- other than the fact that we feel it's really unnecessary because we're dealing with non-hazardous materials; so we really feel just right off the bat that that whole process is really a system that doesn't have to be applied to these materials.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 17

Comment: Used oil sent for off-site management, whether on- or off-spec, as defined in the regs, should not be considered solid waste for purposes of triggering Section 129 incineration mandates. Part 279 distinguishes between on- and off-spec used oil for legitimate off-site blending, marketing, and burning reasons and has served to appropriately protect the environment for many years.

There is simply no environmental justification for the artificial diversion of any used motor oil to Section 129 permitted facilities. Upending the sensitive economics of the used oil recycling system predictably will result in some amount of the used oil -- excuse me, of the used oil falling outside of the system. Do we really want to risk going back to the days of improper road oiling or the mixing of used oil into heating oil for inner city apartment buildings? I think not.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 21

Comment: Today I want to talk about the secondary non-hazardous waste as an alternate fuel.

VEXTOR developed a method of making what we call an engineered fuel whereby we are combining many different types of non-hazardous industrial commercial solid waste into what we would call an engineered fuel -- in other words, a fuel designed to meet the specification of a fuel to the end user. Our main market target initially has been the cement and lime kilns.

The process basically includes a 100 percent QC of all material coming in, both, most importantly to make sure it's non-hazardous waste, and secondly, to determine whether it qualifies an ingredient in the processing of the fuel to meet the end spec.

The processing basically includes the QC, inventory management, ingredient, and the qualification, formulation, and then into a shredding, blending, mixing operations to reduce particle size to make a homogenous material that meets an energy spec, and a chemical spec, and a physical spec.

In the cement kiln industry in particular the fuel substitutes were called, but also, since there is no residue left over, the residue from the engineered fuel is included in the cement clinker, and hence, it has to meet not only the fuel and energy spec but has to meet a product spec. It also cannot do any physical damage to the cement kiln itself, the refractory brick, the feeding systems, et cetera.

What we look for is organic content, low moisture, a non-detect mercury, low halogen, low sulfur, and very little metals. Of course, the material's already been prequalified as a non-hazardous waste.

Some of the examples of the ingredients would include non-recyclable paper and plastic, and cardboard, mixed wood, types of sawdust, shredded consumer products, latex adhesive waste, MRF debris -- municipal recycling facility debris -- oil debris, Banbury or ring oil sludges. These are waste streams from the tire manufacturing industry -- resins and gels, carbon black, and non-recyclable plastic, soy based inks.

The final spec that we have to meet is on the order of 10,000 plus BTUs, less than two-tenths a percent chlorine, less than 10 percent moisture, no mercury -- non-detect mercury -- small particle size, and it also must be physically conveyed either by conveyer or pneumatic.

The experiences we've had so far are with cement and lime kiln testing. We have -- we were delivering this engineered fuel to a long-dry kiln in Pennsylvania for about a year and a half. We did a 50 percent replacement of coal on an equal BTU basis. There was -- we qualified for air emission; the cement kiln qualified for air emissions under PA DEP. There has been no negative effect on the clinker or the kiln itself.

And I guess my purpose here today is to just show that there is an example -- a practical example of being able to take non-hazardous solid waste and convert them into a product that we have sold. We sell it confidentially, but on the order of about 50 percent of the value of coal. It has -- it's been used up to about 50 percent replacement of the coal. The spec will vary depending on if it's used in a pre-calciner, a cement kiln, or the hot end of the cement kiln, or in a lime kiln. Particle size reduces accordingly.

This engineered fuel provides a landfill avoidance to the generator and lowers our liability, replaces fossil fuel. It can -- our fuel contains about 56 percent biomass, have a lower operating cost to the cement and lime industry, and lower emissions.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 22

Comment: I reviewed earlier comments on the advanced notice of proposed rulemaking as well as EPA's responses. I was intrigued by the industry's efforts to convince EPA that sewage sludge was not a solid waste in spite of clear language to the contrary in Section 1004(27) of RCRA and 40 CFR Sections 257.2 and 258.2 where solid waste clearly is identified as sludge from a wastewater treatment plant -- as well as 40 CFR 257.1(11) where EPA actually excluded sewage sludge for land applied this waste under Part 503 from RCRA's minimum criteria.

In its June 4th response to comments received, EPA properly pointed out that sewage sludge has long been considered a solid waste by EPA. Sewage when land applied under Part 503 also fails to meet the legitimacy criteria listed in EPA's response.

For example, just as sewage sludge fails to meet the legitimacy criteria for contaminants and fuel when incinerated, sewage sludge fails to meet those same criteria for contaminants in fertilizer when land applied.

Unfortunately, EPA added in its response that it was not addressing other secondary material end uses. However, EPA's responsibility does not end when it identifies a particular material as a solid waste. It must also ensure that the disposal methods used actually comply with RCRA requirements.

Since Part 503 does not ensure that RCRA requirements are met, it is important for EPA to now remove that unlawful exclusion of land-applied sewage sludge under Section 257.1(11).

According to a 2005 article published by Dr. Caroline Snyder in the International Journal of Occupational Land and Environmental Health, the sewage sludge exclusion was put in place at the demand of Thomas Jorling, then Assistant Administrator for the Office of Water, to be consistent with EPA's policy at that time of promoting sludge -- land application of sludge as the management of -- method of disposing of this particular sludge. However, that was never a lawful basis for failing to impose RCRA requirements.

As pointed out by Dr. Snyder, this exclusion was put in place over the warnings of EPA's own William Sanjour who wrote that this action was -- quote -- illegal and inconsistent with the Agency's Congressional mandate to protect human health and the environment --unquote.

In any event, the stated basis of this exclusion is now moot as EPA long ago stopped promoting land application over other disposal options. In spite of repeated complaints from citizens residing close in proximity to sewage sludge application sites, citizens whose health and well being have been and are currently being negatively impacted, no effort has been made under Part 503 to establish buffers to protect health sensitive individuals, to identify pollution-sensitive sites, and preclude applications on those site, or even to limit at the time of application constituents known to harm water quality -- for example, excessive phosphorous. And, of course, there is no enforcement to ensure compliance with RCRA requirements because they're not there.

Since the Office of Water was not directed by EPA to ensure that RCRA requirements were put in place, it is not surprising that the Office of Water failed to do so. Moreover, I can assure EPA, after years of experience, that sewage sludge land application regulations in states like the Commonwealth of Virginia fall far short of providing the protections to health and in the environment as provided by RCRA.

It is important for EPA to look at the big picture. Think of the Agency as being responsible for plugging many leaks in a dam and to reduce the adverse impacts from those leaks. In the process EPA simply cannot ignore some of those leaks, especially when such action would encourage other leaks.

In this case, as long as EPA refuses to remove the unlawful exclusion of sewage sludge from compliance with RCRA's requirements when it's land applied, simple economics will dictate that the sewage sludge generators will stay with or gravitate to the less stringent land application disposal method and away from the more protective incineration, which is what -- you know, if you put it in place, it doesn't help if you allow it to leak out on the other side.

And I think it's imperative as part of this rulemaking or some other process that this be addressed because identification is just step one. Step two is making sure that the next part is complied with and people are protected.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 28

Comment: The American Lung Association urges EPA to strengthen the proposed rule for incinerators and for the definition of solid waste. The definition of solid waste proposed here is narrow -- so narrow that any facility could burn practically any substance as solid waste and not have to follow the requirements, opening a huge loophole that threatens public health. They would also never have to tell the public what they are burning or how much. That is wrong.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 30

Comment: I'm Tracey Norberg with the Rubber Manufacturers Association, and I'm here today representing our manufacturer members and primarily our tire manufacturer members who manufacture most of the new tires sold in this country.

Our member companies, both our tire members and our non-tire members will be affected by both the Boiler Major Source Rule and the Minor Source Rule; but I'm not here to speak on those today. I wanted to use this time to address the solid waste rule instead.

Since 1990 our members have worked hard to increase the rate of scrap tire management and recovery in this country. In 1990 when we first became involved, only about 11 percent of tires went to end-use markets -- and primarily in tire derived fuel markets.

Today, almost 90 percent of tires do go to end-use markets. That means that tires are not landfilled at the rate they once were. And more importantly, they're not in illegal stockpiles that have fire and other challenges.

We are very proud of the success that we have achieved, both with — in partnership with the EPA and in partnership with the states. And here I wanted to speak on a challenge that we see coming forward looking at the solid waste rule because we are concerned that this market really is in jeopardy.

Tire derived fuel is a — is a market that's very important to the tire — I'm sorry, to the scrap tire management field. It serves as basically an anchor market which enables other markets for scrap tires for both recycling and recovery to flourish. It's an economical market that achieves environmental benefits, including greenhouse gas reductions as cited by EPA in the proposed rule.

We are concerned that how the rule is drafted, particularly the tires that are consumed as whole tire derived fuel, will not be able to be treated as fuels, but instead deemed waste, absent a successful petition through the petition process laid out by EPA.

We're, by the way, very pleased to see that EPA has included a petition process as a process of last resort for facilities that are consuming waste — or, I'm sorry, consuming fuels that would otherwise be classified as waste; and they can show that these materials have not been previously discarded.

However, we believe with tires in the first instance when tires are coming from annually generated sources of tires, they're not coming from landfills or stockpiles, but instead, coming off of people's vehicles treated with value, that these materials have not been discarded and should not be considered waste.

We urge EPA to go back to the approach that you took in the ANPRM. We felt that approach set the proper balance, looking at annually generated tires separately from those tires coming out of stockpiles.

As I mentioned, tires that are annually generated, left at tire dealerships through — enter in an established infrastructure where those tires are treated as valuable commodities. They are then to a processor who delivers them to the end user. And we feel that at no time have those tires been discarded.

When we look at the plain language test that the courts have laid out for determining whether a material has been discarded, clearly tires in this context do not meet that definition. And we urge EPA to really go back to the approach that you set out in the ANPRM.

We feel that when you look at tires from stockpiles, yes, those tires were discarded in the first instance and understand the processing requirement that has been set forth for materials that have been previously discarded.

We would urge, though, an expanded definition of processing to really look at what processing is appropriate for the given end use and not require processing that would go beyond what might be appropriate in that case.

For example, in the cement kiln context, tires would -- if they were coming stockpiles, would be required to be processed and have the metals removed. Interestingly, the metal in tires in the cement kiln process do not -- the metal is not serving as a contaminant. Instead it's serving as a raw ingredient, requiring additional processing and requiring that material to come out of tires would really just require increased energy use, increased emissions, and really be completely opposite of what this rule sets out to do.

So we would urge that the level of processing really be geared towards the end use and not sort of a one-size-fits-all approach to processing.

Now just quickly turn to what would happen if facilities decided to stop using tire derived fuel instead of being regulated under Section 129 of the Clean Air Act.

We see about 50 million scrap tires going into cement kilns every year. And if these markets evaporate, truly we will see a landfilling crisis in this country with tires and increased stockpiling across the country. That's a big concern to us as tire manufacturers. We want these materials to be used appropriately and as fuels so that we don't have a solid waste problem.

Some states could increase use in other markets, but many states could not. And we would see additional ripple effects beyond the loss of those markets because tire-derived fuel does serve as a primary economical market.

So we really urge you to go back. Look at the ANPRM again. And we wholeheartedly approach that approach.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 35

Comment: To provide you with some background on the oil recycling industry, NORA's more than 240 members provide collection and recycling services in each of the 50 states and the District of Columbia. Our members collect and recycle used oil, antifreeze, waste water, oil filters, absorbents, and parts cleaning chemicals, and comply with stringent regulatory safeguards for used oil recycling pursuant to 40 CFR Part 279 and many other sets of environmental

regulations, including the Clean Air Act. The basic components of Part 279 were adopted by EPA in 1985 and strengthened in 1992 pursuant to a clear Congressional mandate to encourage legitimate methods of used oil recycling.

The legislative history of used oil regulation should not be ignored in the present rulemaking effort. In 1980, 1984, and 1986 Congress directed EPA to develop regulations that protect human health and environment while encouraging legitimate used oil recycling. In other words, Congress recognized that if over-regulation kills a recycling market, the adverse environmental consequences may be severe.

A set of balanced regulatory controls emerged that, for all practical purposes, accomplished Congress' goal. NORA members collect and manage vast quantities of used oil as a valuable product in compliance with EPA's regulations. If, instead of a balanced regulatory approach -- if used oil had been declared a hazardous waste, as had been seriously considered, far less used oil would be recycled and the system for handling used oil would be extremely expensive without any environmental protection benefits. The history of used oil regulation in the United States provides a valuable lesson and blueprint for policy makers who genuinely care about environmental protection.

NORA's basic perspective on the proposed rule is very straightforward. NORA agrees with EPA's conclusion that on-specification used oil fuel does not constitute a solid waste because it is not abandoned and otherwise discarded. It constitutes a legitimate and traditional fuel. NORA contends that for precisely the same reasons off-specification used oil does not constitute a solid waste. The facts demonstrate that off-spec used oil is a legitimate and traditional fuel. It should be emphasized that the distinction between on-spec and off-spec used oil fuel had nothing to do with its heating quality. Both categories of used oil fuel will generally have the same BTU content. It's roughly 140,000 BTUs per gallon, the equivalent of virgin petroleum oil -- if the water content is the same.

The distinction between the two categories of used oil fuel is a somewhat arbitrary one, created by EPA in 1985. If any parameter of four metals exceeds a specified concentration, the used oil is classified as off-specification. If total halogens are greater than 4,000 parts per million, the used oil is off-specification.

Also, if the flashpoint of the used oil is lower than a hundred degrees Fahrenheit, the used oil is classified as off-specification. NORA's collective experience in the nearly 25 years since this rule was adopted by EPA is that the metals rarely exceed the specified concentrations. We have some detailed information which are in our written comments on that.

Rather, used oil is -- used oil fuel is off-spec because of total halogens or flashpoint. However, neither of those factors adversely affects the quality of this type of used oil as a fuel. The market for off-spec used oil under the current regulations is strong and reliable.

There are, according to the EPA's Material Characterization paper on used oil for this rule making, approximately 750 industrial furnaces and boilers that burn off-spec used oil fuel. These are primarily cement kilns, boilers for utilities, furnaces at steel mills, and other major

industrial burners. All these burners are stringently regulated by the Clean Air Act, and each utilizes and maintains expensive pollution control equipment.

There is absolutely nothing in the preamble to any of the proposed rules that suggests that when burning used oil fuel, these industrial burners or boilers emits halogens in quantities greater than would be the case if the off-spec used oil fuel were burned in facilities with Section 129 permits. This point needs to be carefully considered by EPA because there would be no justification of this proposed rule as it would apply to off-specification used oil fuel if no environmental benefits are to be achieved.

It is also worth pointing out that Exhibit 6 of the Material Characterization paper shows that the principal benefit of combustion of used oil are associated with upstream production offsets, include substantial reduction of NO_x, CO, and CO₂ emissions.

In terms of combustion-specific emissions, use of used oil results in notably lower NO_x emissions, in particular, when compared to residual fuel oil. The term upstream — this is in quotes — upstream production offsets is a shorthand way of recognizing some of the benefits of used oil recycling. It means that when a quantity of fuel is produced from used oil that is collected and recycled, the adverse environmental impacts would have been created by producing the same quantity of virgin fuel have been eliminated. Unfortunately, these benefits are threatened by the proposed rule that, perhaps unintentionally, could effectively destroy the market for off-spec used oil fuel.

Currently, there is a steady and reliable market for off-spec used oil fuel. Off-spec used oil is collected and marketed in much the same way as on-spec used oil. The difference is in the number of end users — approximately 750 industrial furnaces and boilers — versus a more limited number of Section 129 solid waste incinerators. Fewer outlets will result in dramatically increased transportation costs from the geographically diverse generator locations to these limited facilities.

The traditional fuels definition — I'll skip ahead to the alternative approach.

The traditional fuels definition for the alternative approach is apparently changed from the traditional fuels we have identified earlier to specifically exclude on-spec used oil. And this could change or should have been addressed in the above statement.

Again, it's in my written comments here; but as we had some going back and forth regarding the alternative approach — and it appears that they are going to be including on-spec oil as a solid waste.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 37

Comment: I'm the Director of Government and Business Relations for the Tire Industry Association, known as TIA. We're an international association representing all segments of the tire industry, including those that manufacture retreaded tires, repair, recycle, sell, service, or use new or retreaded tires, and also those suppliers or individuals who furnish equipment, material, or services to the industry. Our recycler members collect over a hundred and thirty million tires annually.

We're testifying today to register our concerns with the rulemaking governing the use of tires as fuel in cement kilns and other combustion units. I will more than likely echo many comments heard today, so I'm going to be brief — specifically from RMA.

We worry about the consequences of any changes in the classification of tires as fuel. We are simply unable to fathom the dawning prospect of millions of tires suddenly appearing on the landscape, both literally and figuratively.

Our industry has forcefully dealt with one of the most significant environmental issues that our country ignored for many years as scrap tire piles are finally coming to an end in this industry. The existence of these piles created numerous health hazards as vast breeding grounds for disease-carrying insects and the aftermath of a tire fire is now labeled as a toxic superfund by this Agency. We will be disappointed if this were — if this environmental success story were reversed by this ruling.

Closer to home — and this may be one of the more important points I'd like to make — our retail members have by and large come to understand the importance of recycling tires in the correct manner, and any change in the pattern of this cycle could set back retail behavior for years.

Our processor members have certainly come to depend on the economies of scale that maintain the value of this commodity and regulate this market. As new industries form around the constant innovation that we see for recycled rubber, the market must remain stable to support this research and development.

And lastly the point I want to make is that the states will be left with the burden of dealing with these growing tire piles with little resources to utilize. As we have heard from our state affiliates, that many state tire recycling funds have been raised by — have been raided by state treasuries desperate for general funds.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0396
Comment Excerpt Number: 38

Comment: A summary of API's key points follows. Based on our review of the proposal, the principles underlying the proposed rule are generally consistent with the statutory definition of solid waste, and from our perspective, encourage a greater role of energy recovery from secondary materials in meeting energy needs, both today and in the future.

Second, the proposed definition of secondary material differs from the understanding of that same term under Subtitle C. If codified, the definition in the proposal from our perspective would result in challenges in implementing RCRA. The proposed definition of secondary material needs to be reworked.

And our third main point is that the proposal recognizes that traditional fuels are not solid wastes when burned in a combustion unit. Certainly, fuels are not discarded when combusted and are not solid wastes. This premise is promising. It's in the proposal in the preamble, and we think that EPA can do a little more in the final rule to bring that out further.

API's interest in this rulemaking follows: We're interested in this proposal primarily for two reasons: Because -- and this is no surprise. There's one definition of solid waste, concepts that EPA advances in the proposal logically should, in the long run, influence further development of the Subtitle C definition of solid waste.

And all of API's members either produce, collect, or process various hydrocarbon-bearing second materials that are non-hazardous and that are highly suitable for legitimate use as fuels or as ingredients in combustion units. Accordingly, our members will be affected by this proposal.

Now, for the most part, Point one, the principles underlying the proposed rule are consistent with the statutory definition of solid waste. For RCRA to be a solid waste, the material must be discarded. And this is where the lawyer comments come in. API does not believe that it is possible to apply a plain-English meaning of discard to a situation where materials are neither disposed nor abandoned but retained and legitimately burned as fuel for energy recovery or used as an ingredient in a manufacturing process. With a few exceptions that we'll highlight in our written comments, EPA's proposed rule appears to conform with this principle, which is good.

We believe that the proposed rule represents an improvement over the current Subtitle C definition of solid waste. The Subtitle C definition has historically reflected a bias against burning for energy recovery. That bias is far less evident in today's proposal.

In the proposal EPA acknowledges and moves beyond the historic association of combustion of secondary materials with disposal. This position seems like a common sense interpretation of the term solid waste, per RCRA.

Moreover, the proposal is quite forward-thinking by acknowledging both advances in technology and the potentially much greater role of energy recovery from secondary materials in supplying future energy needs.

Our second comment, the proposed definition of secondary material needs to be reworked.

The proposed rule initially presumes that non-hazardous secondary materials that are combusted are solid wastes. The proposal then provides exclusions for materials or fuels used in a combustion unit and that also meet the legitimacy criteria. The term secondary material is thus very important to the scope of the rulemaking. The proposed rule would define secondary material as any material that is not the primary product of a manufacturing or commercial process and can include post-consumer material, off-spec commercial chemical products or manufacturing chemical intermediates, post-industrial material, and scrap.

We question why EPA is proposing a definition of secondary material that is different than the common understanding from the usage of that term in the RCRA Subtitle C regulations. Now although the Subtitle C regulations do not spell out and define secondary materials or even employ the term, we note that EPA did explain in the preamble to the 1985 revisions to the Subtitle C definition of solid waste that — quote — the rule itself refers to the following types of secondary materials: spent materials, sludges, by-products, scrap metal, and commercial chemical products, recycled in ways that differ from their normal use.

In short, there are two different interpretations and definitions looking at this proposal and what's in RCRA Subtitle C. We think that this can lead to unnecessary confusion in implementing RCRA; and we question why there are different definitions.

At a minimum, the proposed definition could be amended to avoid inadvertently capturing materials EPA does not intend to capture. For example, the definition refers to a material that is not the primary product of a process. This makes no allowance for the concept of co-products that is familiar to most RCRA practitioners.

As another example, the definition refers without qualification to off-spec commercial chemical products or manufacturing chemical intermediates. Under Subtitle C only such products or intermediates burned in lieu of their normal manner of use are considered secondary materials. Under the proposal here, off-spec traditional fuels could be considered secondary materials, but that is not clearly consistent with EPA's intent.

And our final point is with regard to the fact that traditional fuels are not solid wastes when combusted, and we think that's self-evident.

Again, this principle is stated in the preamble of the proposal. Particularly because of the potentially confusing definition of secondary material that I just discussed, we would encourage EPA to include regulatory language in the final rule that clearly excludes traditional fuels from the scope of the rule.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 40

Comment: The solid waste definitions EPA has set has a potential to seriously restrict which types of biomass that may be burned for their carbon-neutral energy and which may be pushed into the waste stream.

The non-hazardous secondary materials rule, EPA should define these secondary biomass materials like urban wood and wastewater residuals as fuel and promote their use which displaces fossil fuels and is consistent with the country's call for greater use of renewables.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 43

Comment: Now let me switch to the definition of solid waste issue. This is a completely different set of comments, unfortunately, because this rule is dangerous and irresponsible.

Let me just say that the rule defines as fuel things like spent plastics, used solvents, waste chemicals, used oil, industrial sludges. And it allows these wastes -- and EPA refers to them as secondary materials. These are wastes by anybody's -- any real person's standards -- allows these wastes to be burned in boilers and process heaters that are not subject to any meaningful pollution controls, or monitoring requirements, or reporting requirements.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0396
Comment Excerpt Number: 45

Comment: Now, the rationale in this proposed rule for this exemption is a legal argument. EPA claims not that it is a good thing to have all of these unregulated incinerators operating in people's back yards. It claims that it's forced to this result by the law.

That argument is wrong. In fact, this exemption is not just not required, it violates the law. At a minimum -- and this is what I think what's really important for Administrator Jackson to take home with this. This is well with Administrator Jackson's authority. She can define used oil, waste plastics, spent chemicals as waste. Hiding behind a legal argument to do otherwise is a very dangerous precedent.

We urge her to recognize that this is a stark choice; it is in her court, and she can either choose to let these facilities continue to poison the communities next to them or control them.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0397
Comment Excerpt Number: 45

Comment: And I am especially concerned about the proposed definition regarding non-hazardous secondary materials. It's not what goes into the boiler or incinerator, or what you call it, or where it comes from that's important. What comes out of the boiler or incinerator is what's important. Also, if discarded hazardous secondary materials are processed into a legitimate fuel or ingredient, we need to ensure that such processing itself doesn't lead to air pollution. While it's possible to minimize the amount of waste that must be disposed of in landfills or reduce our reliance on fossil fuels by burning what would otherwise be waste, it must only be done if it doesn't pollute our air.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0396
Comment Excerpt Number: 47

Comment: The solid waste definitions EPA has set has the potential to restrict which types of biomass may be burned for their carbon-neutral energy value which may be pushed into the waste stream and consequently within the confines of CISWI standards. This concept defies logic and simply cannot happen due to the standardized components of processing.

In the non-hazardous secondary materials rule EPA should define these secondary biomass materials like resonated trim, pulp paper, waste water residuals, and promote their use which displaces fossil fuels and is consistent with the President's call for greater renewable fuels.

For example, recycled process residuals must be considered a fuel because they are critical to the feed stocks for pulp and paper mills. They have inherent heat value. They are intentionally recovered from the manufacturing process and are processed before being burned.

As defined, RPRs are materials that are removed during the repulping of recovered fiber to generate fibers which can be used to make new pulp, paper, and paperboard products. The recovered fibers are obtained through various commercial and residential recycling programs and are never discarded, given their value.

EPA has long determined that recycled paper is not a solid waste. They are secondary materials generated on site as part of the manufacturing process. The preparation process for recovered fibers, removing non-paper components such as inks, which is what we do in our processes, is equivalent to the way trees are processed to remove non-papermaking components such as bark and ligament. Both processes are used to provide consistent fibers to make products from common feedstock.

It must be understood that RPRs are secondary materials from recovered fiber repulping process. They are processed to enhance heating value. They do not materially contribute to excess air pollutants. They serve a fundamental part of the fuel mix used by pulp and paper mills. Therefore, RPR should never be considered a solid waste and burned for energy recovery.

EPA's assumption that non-hazardous secondary materials that are used as fuels and are managed outside the control of the generator are solid wastes unless they are processed — unless they are processed into non-waste fuel products is patently inaccurate.

This narrow view of recycling is not based on any record showing that non-hazardous materials that are transferred to other entities are discarded. Case law does not support the sweeping assumption that any material that leaves the control of the generator is per se solid waste.

The record compiled by EPA for this rulemaking demonstrates that biomass residuals are legitimately recycled by being burned for energy recovery. The record does not demonstrate any discard occurring from this practice or any adverse impacts to human health or the environment.

These materials never enter the waste stream and never become part of the waste disposal problem. Accordingly, it would exceed EPA's authority to promulgate regulations that would bring these materials under regulation under the solid waste and RCRA.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 49

Comment: In regards to the solid waste rule, just to give you a little bit of background, in our finishing end operations we sand the panels and in the process generate wood residue, which is basically wood dust containing small amounts of resin. Utilizing this material on site as a fuel in our boiler, or as the substitute for our own material, reduces the environmental impact of disposing of this material in off-site landfills, reduces the greenhouse gas generation associated with the landfills, and also reduces our fossil fuel demand.

SierraPine supports EPA's position in the primary proposal as it relates to resonated wood products -- or I'm sorry -- yeah, resonated wood residuals. When used as fuels within the control of the generator, EPA states in the preamble that they have decided to classify these materials as non-waste. We do not support the statements in the alternative approach that moves wood residuals into a category of solid waste as this is a legitimate use of secondary materials; i.e., wood residues or sander dust used within the continuous industrial process.

Sander dust does meet the legitimacy criteria in that it is handled as a valuable commodity, has meaningful heating value, is used in a combustion unit that recovers energy, and it contains contaminants at levels comparable to those of traditional fuels.

The material is never discarded, and therefore, should not require consideration under the solid waste regulations. The value of this commodity can be related in terms of the potential cost avoidance. For example, based on historical sander dust usage at one of our facilities, to replace sander dust fuel with natural gas fuel, the additional operating costs are estimated to range from 1- to 2.9 million per year.

This does not take into account the costs associated with transportation and disposal of the sander dust off site. Again, this material has not started and we should not be forced by the

alternative proposals to dispose of this material in a landfill. And it truly does possess significant value.

In any event, we believe it is important for the final rules for the petition process for granting non-waste terminations. So again, as I stated earlier, we do not support the alternative approach.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 57

Comment: Burning waste to energy and calling it recycling is extremely misleading.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 58

Comment: Burning waste of any kind is a very bad practice, and the current proposal allows an enormous amount of waste burning to go unregulated because it exempts a huge amount of industrial waste. We believe that the EPA can do better, but we applaud this effort to help us move to a clean energy future. The EPA has the authority and the obligation to impose the strictest available standards on anyone burning industrial or other waste.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 61

Comment: There's no definition of what back-up fuel is, so they can use back-up fuel for 90 percent of their operations and their primary fuel for 10 percent of their operations. And that's a real problem that we believe needs to be corrected.

We're also concerned about biomass and the definition of biomass. It only -- that if you're going to use biomass, it would only be clean wood, not treated wood, not lead -- wood with lead in it and other types of contamination. We believe that there needs to be stronger regulation of these -- of what's defined as biomass also.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 63

Comment: The one piece that is of special concern in the Public Health Community and also the environmental community is the definition of solid waste. Essentially, for us, we find this a fairly irresponsible rule and actually illegal.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 66

Comment: We have our legislators and our City Council trying to go up and change definitions of burning trash. And we know incineration is wrong and simply going about and trying to give it a new fancy name really isn't going to fool anybody. And why are we trying to fool ourselves? Why aren't we trying to do the best that we can? So we've spent a lot of time looking at cumulative impacts and helping the

U.S. EPA and Cal/EPA partner together so that we can combine our resources and work directly with impacted communities looking at solutions. People must understand that once you get involved in a situation like this where you have so many impacts in your community, you really have to take the time to look for solutions and not just say no to everything, and that's what we've tried to do in our community.

And the trash burning and the battles that we've had going on with this waste energy and just barely scratching on the surface, you see that their basing these claims on unreliable information. These facilities in other countries have been shut down. They're not helping. We don't need to create more dioxin. We don't need to create more chemicals and we certainly don't need any industry.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 69

Comment: I appeared last year to testify on behalf of the Sierra Club on the revisions to the definition of solid waste. Again, we are please to testify to say although EPA's rule for major source boilers deserves applaud, EPA's definition of non-hazardous solid waste is dangerous and irresponsible.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 70

Comment: The American Lung Association urges the EPA to strengthen the proposed rule for incinerators and for the definition of solid waste. The definition of solid waste proposed here is so narrow that any facility could burn practically any substance as solid waste and not have to follow the requirements, opening a huge loophole that threatens public health. They would also

never have to tell the public what they're burning or how much they are burning. That's simply wrong.

The American Lung Association here today represents the children with asthma in the communities next door to these facilities. We also speak for the adults on oxygen who cannot be here to say that we must have air that does not make it harder for them to breathe.

We speak for all whose lives that are threatened by pollution spewing from these boilers and incinerators. All of us here today and all of those who cannot join us deserve the right to breathe clean, healthy air. We are counting on the EPA to deliver cleaner, healthier air in every community.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 71

Comment: If this proposal is finalized, it will hurt people in communities across the country by allowing them to be exposed to toxic pollution from uncontrolled waste incinerators and by depriving them of any way to identify the toxics they're exposed or hold the polluters accountable. It will badly damage this Agency's credibility as a protector of communities.

So, Administrator Jackson, we are hoping that you don't let this issue be obscured by arguments that are misguided, that it's well within your authority to bring toxic emissions under control in these industrial incinerators. We are very, very happy with the way Administrator Jackson is working on many issues, including Montauk removal, which we work on, including, again, the review of definition of solid waste from last year.

And we work closely with her -- I was just on a call today with -- she came on with the National Environmental Justice Advisory Commission on the BP oil spill and has dedicated the Agency to resolve -- to work on that issue. So we're hoping that this won't be an aberration, not to protect -- to protect the communities.

And on behalf of the members of the Sierra Club, we respectfully request that EPA withdraw this rule, which will significantly weaken the public's protection from millions of tons of non-hazardous waste. And we hope you'll consider seriously how this rule endangers the public and our environment that would go counter against her environmental justice priority and so we want to make sure that the -- no community is unfairly burdened or endangered.

[Question from Panelist] You're asking us to withdraw the definition of solid waste?

[Commenter] No, I'm sorry, withdraw the -- what did I say -- to the rule. To not finalize the rule. That's what I meant.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 72

Comment: Like I said earlier, hopefully you guys have heard these talking points today several times. But as I understand it, the definition of, you know, waste of -- that's to be incinerated doesn't really include, at this point, solid waste. That is, it doesn't include shredded material like tires and things like that. I'm not sure if that's completely correct.

Correct me if I'm wrong, please, but I'm here to ask that you don't bow to industry groups defining tires, for example, plastics, solvents, anything that's naturally -- you know, like a toxin, a chemical be defined as, you know, anything other than the solid waste that it actually is.

They produce, you know, toxins that are -- that can be fatal. Some of these plants are near schools, houses, so I'm just here to hopefully make sure the definition doesn't stray from the facts in that these toxins and chemicals are what they are in whatever form they come in. And if you shred a tire, it's still a tire. It's just in a different form. So, I ask that you don't allow exemptions for on-site burning from like chemical plants. From what I understand, that's an opening in the definition as well. So I ask that that not be an available loophole to chemical production companies and oil plant -- you know, Chevron, ConocoPhillips. Those, I understand, are two of the major plants down here that could be -- you know, cause infractions or what I would consider infractions.

And I ask this because, you know, we all breathe the same air. If you guys have children -- I don't know where you live, but I plan on having children and getting married soon. And, you know -- I mean, I can't see this being a viable option for anyone, you know -- and also future generations especially.

So please just don't allow exemptions for on-site burning. We definitely need that oversight in the regulation to stand and be firm and be a fair logical definition, not something that's open to abuse by companies that would rather not follow any sort of environmental regulations or rules. And so we just need the definition be revised to include the burning of any toxic material, in any form, be strictly prohibited.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0397
Comment Excerpt Number: 75

Comment: While the boiler and process heater proposals are a significant step towards clean air, we are gravely concerned over the proposed solid waste standards. In particular, the allowance of any industry to burn its own waste as fuel is dangerous and irresponsible. This policy would promote the burning of hazardous waste such as spent solvents, off-spec plastics and chemicals, and coal mining wastes, among other items of concern, without any appropriate controls or monitoring.

This narrow definition of solid waste puts thousands of children, elderly, and sensitive individuals at risk through industrial incinerators and facilities burning solid waste that are sited near homes, schools, daycares and health centers. Any facility that acts as an incinerator should be regulated as such, including appropriate controls and monitoring.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Margaret Jusiel
Commenter Affiliation: Citizen
Document Control Number: EPA-HQ-OAR-2006-0790-0972
Comment Excerpt Number: 1

Comment: I'm sure you've received many long letters stating duplicate concerns over the EPA's proposed Solid Waste Definition Rule. Please consider this short note an additional support against this rule.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Jonathan Fishman
Commenter Affiliation: Citizen
Document Control Number: EPA-HQ-OAR-2006-0790-1228
Comment Excerpt Number: 1

Comment: Please don't accept the proposed Solid Waste Definition Rule. Please, No Unregulated burning. Industry will adjust.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Fred T Simpson
Commenter Affiliation: Scotch and Gulf Lumber, LLC
Document Control Number: EPA-HQ-OAR-2006-0790-1061.1
Comment Excerpt Number: 4

Comment: EPA should ensure that all forms of biomass are considered fuels rather than wastes.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0985
Comment Excerpt Number: 4

Comment: Use the non-hazardous secondary materials solid waste definition rule that backs up the national goals for energy independence and waste minimization by clearly and easily qualifying residual materials as fuels. For Weyerhaeuser and the forest product industry, it's important that the residuals such as resinate, sander dust, and panel trim biomass, and waste water treatment biomass solids, as well as other alternative fuels that arise in the future are treated as fuels under these rules.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 6

Comment: I am here to comment on the proposed rule regarding Identification of Non-Hazardous Secondary Materials that are Solid Wastes.

The United States Business Council for Sustainable Development, or USBBCSD, or Business Council is a network of companies representing 20 major industrial sectors affiliated with the World Business Council for Sustainable Development, another 200 companies from around the world that are all seeking to identify and promote projects and business activities demonstrating the business case for sustainability for the triple bottom line that is economic, environment, and societal values.

One of our most successful projects in the United States is called By-Product Synergy. By-Product Synergy is the matching of under-valued by-products, transportation, water, energy and other streams from one facility with potential users at another facility to create new revenues or savings, and create environmental and societal benefits. Stated simply, By-Product Synergy is identifying how a secondary material from one process can be used as a resource in another process.

The U.S. Business Council started working on by-products synergy in 1997 with the support US EPA as a co-funder of the first project in Tampico, Mexico. Since that initial collaborative project, we have collected more than a dozen regional synergy products across North America including projects in Kansas City, New Jersey, Puget Sound, Mobile, Alabama, Chicago, Ohio, Dallas, and Houston. We have projects developing currently in the east San Francisco Bay, south Boston and Austin, Texas.

Hundreds of companies along with city and state governments and regional non- -- nongovernmental

organizations have participated with us in these projects producing hundreds of synergies that have saved tens of millions of dollars while significantly cutting energy, water, air emissions of all kinds, and waste to landfills. These projects have developed over the past 13 years with strong policy support, and often significant funding support, from US EPA regional and headquarters offices. All of this is to say that U.S. industries have identified and implemented many different by-products synergies that provide environmental benefits, promote energy independence, preserve natural resources, and save money.

In the Advanced Notice of Proposed Rulemaking, EPA identified a wide variety of successful by-product synergies and the environmental benefits they provide. For example, use of -- of scrap tires or tire-derived fuel has resulted in a significant decrease in the number of tires destined for landfill disposal, a reduction in some types of air emissions, and elimination of the environmental impact associated with obtaining raw virgin fuel sources. Used oil burned for energy recovery results in significantly lower NOx emissions than fuel oil, and also eliminates the greenhouse gas emissions associated with upstream production of fossil fuels. Cutoff of coal fly ash in cement kiln dust and coal refutes were also identified in the advantaged notice.

By-Product Synergy projects are becoming a worldwide phenomenon. The European union has made it a central element of the sustainability and issues, and in the United Kingdom, the British government has funded by-products synergy a national waste management energy efficiency and climate control program, though being English they call it industrial semiosis. This is the -- this program has been cited by more than a hundred members of the English parliament as one of the most productive and effective government-supported initiatives underway. Japan, Australia, Portugal, China and other countries are all pursuing the same kind of efficiency program.

In the United States, By-Product Synergy is an essential element of EPA's stated goals for the proposed rule as waste management generally include -- including maximizing the usefulness of secondary materials, reducing wastes, conserving energy, reducing air emissions, and reducing greenhouse gas emissions.

The business council supports any measure that will remove unnecessary barriers to and provide greater incentives for By-Product Synergy projects. Accordingly, the business council and its member companies are very interested in the proposed rules -- rule regarding the identification of non-hazardous secondary materials that are solid wastes. We have, however, grave concerns about the proposed rule because it appears to severely limit effective by-product synergies, and did so without any corresponding benefit to human health or the environment.

In fact, the effect of the rule will likely be an increase in air emissions, greater use of virgin natural resources, and increase in energy consumption, more waste in landfills, more greenhouse gas emissions, and increase administrative burden on EPA, and increased costs for the regulated community.

The business council believes that the proposed rules focus on whether a non-hazardous secondary material fuel remains in possession of the generator to not be a necessary or determining factor in whether a secondary material is a waste. The council believes that the framework set forth in the advanced notice of proposed rulemaking properly places the focus on the beneficial use of the secondary material.

For reasons not clearly or adequately set forth in the proposed rule, EPA abandoned the reasonable approach in the advanced notice, an approach that would have promoted by-product synergies while remaining protective of human health and the environment. We're still -- in addition to the making of -- making use of current by-product synergies either impossible or prohibitively burdensome, complicated or expensive, the regulatory hurdles in the proposed rule will likely discourage research and collaboration, as well as innovation into additional by-product synergies and supporting technologies.

The business council would submit written comments with additional data that explain our concerns in greater detail and includes specific examples.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has

submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 8

Comment: There should be a better delineation of definitions of boilers and incinerators to ensure that facilities are clear on exactly what is a boiler and what is an incinerator. As well, we believe that the definition of solid waste is too lenient.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 17

Comment: We do however want to voice opposition to your proposed definition of solid waste, and many of our staff members will speak to that, as well. Allowing hazardous and toxic materials to be put into industrial boilers and incinerators under the guise of solid waste or fuel would do the opposite of the other proposed emissions limits. It would put more toxic materials into our air in Texas and throughout the country. I've been working with Texas Campaign for the Environment for about eight years, so this EPA administration, by far and away, has been the strongest, the most protected of public health standards and air standards and water standards. Decision after decision, ruling after ruling, I've seen the EPA take steps in the past year and a half that are just good news after news. This is really the first time that I've come to an EPA to say that that proposal is a bad idea, so I'm -- and in our organization is very actually shocked, frankly, that -- that you propose to define toxics materials as solid waste and fuel in industrial

boilers. The EPA can definitely do better than that. The EPA has done better over the year and a half. I know, in seeing the decisions that you've made previously, that the EPA can come up with a better definition of solid waste, that's more protective of public health.

That's really what our staff members will testify today. I doubt that all of us will take our whole six minutes and give you a lot of technical details. But for us, this is a very simple matter of air quality in Houston and throughout the country, and we can't just define something if it's toxic material and hazardous material and will poison our air. We can't just define it as okay, and fuel, and allow it to be burned.

I know it's a cost issue for industry, and they'll argue costs until they're blue in the face, but it costs us, too, if that stuff ends up in the air.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 18

Comment: When loopholes are allowed to happen where you can't burn an entire tire in a boiler for energy, but you can chip it up and burn it as if that's a lot of change for the use of these tires to burn it for energy.

I -- I don't see -- I don't see the logic. I don't see the logic in allowing that chipped up tire to be burned for energy, and so I very much -- if the industry has to spend a little bit more money to burn clean things or to protect the air quality and allow -- you know, the number one reason my kids miss school these days is asthma. You know, it's completely preventable. And so we very much need to do as much as we can do for the people that can't do anything for themselves, especially folks right around these facilities.

And so I just -- I'm putting my -- my

faith in you guys that you're gonna do what I can't, and that's to regulate the big industries, so please protect the air.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 19

Comment: Allowing these loopholes to remain in the legislation, you know, to burn toxic waste in industrial boilers, that -- I feel like that really undermines the small sacrifices that we all make every day to improve the planet. So yeah, I definitely want to encourage you to remove those loopholes and, you know, hold industry accountable even if they have to pay a little bit more money.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 45

Comment: Our concern with the proposed rule is that it may severely limit the use of our industry to use alternative fuels in producing Portland cement, which is a necessary material in the construction of infrastructure of buildings, homes, roads in the United States. I'd like to focus on one particular aspect of alternative fuels, and that is scrap tires. Scrap tires are a major problem in this country, especially in Texas along border areas, and really in the entire world. There are about 300 million scrap tires produced or

really discarded in the United States every year. About 60 million of those scrap tires are burned in cement kilns as alternative fuels. That's 20 percent of the supply of scrapped tires that are used as alternative fuels.

Now, what's the benefit of doing that?

Well, first of all, a scrap tire has about 33 -- actually about 25 percent more BTU value, ton-per-kiln, than a ton of coal, and about the same BTU value as oil on a pound-for-pound basis. In the U.S., there were about 12.6 billion -- I'm sorry -- 12.6 trillion BTUs of energy generated in the cement industry through the use of scrap tires. Now, this avoids the use of other fuels, virgin fossil fuels such as coal or oil or other materials. In all about 3.6 percent of the energy that is used -- not electrical energy -- but is used to produce Portland cement was done by scrap tires.

About 48 of the 113 or so cement plants in the United States are licensed to use scrap tires, and in Texas eight of ten plants can use scrap tires. Scrap tires are -- are a good fuel. They limit the amount of tires that are ultimately disposed of in landfills, and of course scrap tires placed in a landfill, it's -- it's there pretty much forever, and it attracts bugs and insects and disease, rodents. The emissions that result from the use of scrap tires are actually, and in most cases, reduced from a cement plant that burns scrap tires.

For instance, the dioxin and furan levels that come out of a cement plant, which are generally very small to begin with, are one-third of those -- in -- in a plant to uses scrap tires, the dioxin/furan levels are about one-third of those as a plant that does not use scrapped tires, and this is to a statistically significant level. NO_x emissions are also significant to reduce. Particulates are about 35 percent reduced, although particulates are very, very small to begin with, and that is not a statistically significant number. Additionally, SO_x and metals emissions are reduced.

Carbon monoxide and total hydrocarbons are slightly increased through the use of scrapped tires, but not to a statistically significant level. The -- the rules that EPA is -- are proposing for the identification of non-hazardous secondary materials that are solid waste, we're really concerned that this would

compromise the ability for responsible industries such as the Portland cement industry that officially utilize these wastes in uses such as fuel that would -- that would otherwise, if the wastes were not used, compromise environmental quality.

And I'd like to end with a note from the TCBQ. This is a quote from one of their publications and -- and it was a publication on the problem with scrapped tires within the State of Texas, and they said that cement kilns, when burning tires at a high heat, which cement kilns always do, and using pollution controls, which again, cement plants always do, do not compromise air quality.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 47

Comment: These benefits, I think, can be negated by standards that will allow for local area plants to burn local waste, whether it be tires or other products on hand. This will be -- to increase local pollution for Houston; especially, this is a big deal. We have -- the number one excuse for students missing school is asthma related. If we increase air emissions from plants that are burning local waste, this will not decrease, but increase.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 56

Comment: The proposition to deregulate what the industry can burn in its incinerators is not only a horrible idea. I believe it's ignoring all Houstonians rights to clean air. The EPA has been doing an amazing job for Houston in the past years, so it did a great job raising the ozone standards, and I greatly appreciate it. I greatly appreciate it. Don't take this massive step backwards.

The EPA, as I look at them, they're supposed to look after the people and not the industry. Your job is to look after the Americans, not -- you know, the -- the industry, who technically can vote -- I'm not gonna get started on that. But by adopting this rule, you're allowing the industry to pump millions of pounds of dioxin and other chemicals into the local air. Dioxin is a single -- it's the single worst human carcinogen known to man, and its main cause is incinerators. I can't really spell it out any clearer than that. You're literally pumping the number one worst chemical for human health into our air by allowing this to happen.

So I ask you -- no, I implore you not to let this happen. I really -- I just want you to ask yourself, what I would I want in my community. I know you guys know the answer to that question, so don't trash us. Don't trash our lungs. Houston, I love this city, but the pollution has made it to the point to where I -- I feel that I cannot exist in this city. Do it for us.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 63

Comment: The solid waste definitions EPA set have the potential to seriously restrict which types of biomass may be

burned for their carbon-neutral energy and which may be pushed into the waste stream. In the Non-Hazardous Secondary Materials rule, EPA should define these secondary biomass materials like urban wood and wastewater residuals as fuels and promote their use which displaces fossil fuels and is consistent with the country's call for greater use of renewable fuels.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 69

Comment: What doesn't make sense is your definition, or the proposed definition, of "solid waste." Let me see here. By having these, you know, shredded tires, spent solvents, spent chemicals, and plastics, by having them -- you know, by having the -- gosh, I'm nervous -- having the definition of "solid waste" narrowed would allow for them to burn these materials in order to produce their own fuel with absolutely no regulation, without absolutely no obligation to report or identify the toxins that they're putting in our air that we breathe daily. To me, this doesn't make any sense. I don't understand how that is protecting human health. Maybe -- I mean, I'm not a scientist, but to me, common sense would say that having -- making the guidelines -- or the definition of solid waste more strict to where they can't burn these items which are known to release mercury, lead, formaldehyde -- there's more on here that I can't find -- benzene, dioxins. I mean, you guys -- we all know how awful that is. It causes mutations, cancer, asthma, and that's among a few of the awful health conditions that it would cause. And in order -- I mean, if this happens where you would narrow the definition of solid waste and allow them to burn these spent chemicals, solvents, plastics, rubber as fuel, goes unregulated and without

the community being able to know, I don't understand how that correlates with the Environmental Protection Agency's mission statement.

We definitely want -- we want zero tolerance, not zero protection. Industry has been getting away with murder for -- practically murder for a very long time, and I think we should have -- actually, I know we should have a definite separation of the Environmental Protection Agency and loving industry. Jobs are not to love industry; it's to protect human health, water, air, and land quality. It's not to cradle poor industry that makes massive profits every year; it's not -- it's not to baby them and say, oh, okay, well, you don't want to fork over billions of dollars in order have these things regulated. That doesn't make sense. Like how the gentlemen before us, which I'm sure hard working men, they highlighted that their property taxes that they pay goes to benefit schools.

What benefit does it do if the toxins that they're pumping out of their factories are harming childrens' health? You guys know that children are the most susceptible to these toxins that are being emitted into the air, so I mean, I would really like to definitely press to please do what the Environmental Protection Agency was formed to do, which is to protect our public health and our water and our air; not to baby corporations and to let them get away with putting awful chemicals into our air.

And so yeah, in a nutshell, I want to thank you for making the first steps. Again, thank you. However, please don't take two steps backwards by not strictly defining solid waste. It doesn't make any sense.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 71

Comment: So with all of this progress of eliminating the toxic junk that we breathe, and ozone and the smog, taking -- taking a step backwards is taking a dangerous risk for our economy and our human health, and I think that we can all agree on that.

The way that we define solid waste when it is used for industrial facilities that use process heaters and broilers, is -- it's crucial to the lives of thousands, and it's so funny how such a small definition can make or break the lives of thousands of people every year that breathe the air we have here in the City of Houston.

But again, it's important that we are not taking the step backwards into that wrong direction, but we are moving forward. So, yeah, Scarlet, again, it doesn't make any sense. Solid waste that -- shredded tires, spent chemicals, spent solvents, coal mining waste, used motor oil, and other kinds of toxic waste. It's -- it's -- that sounds more like industrial toxic carcinogens, things that cause cancer, asthma, autism, mutations, lung disease, all of which of these things have been gradually multiplying within the past few decades.

Last week, my grandfather died of lung cancer and never smoked a day in his life, you know, the close -- like the closest person in my life that has passed away. And I'm supposed to be lucky for that, you know, I'm lucky that I even have grandparents. And again, let's not take a step backwards on defining solid waste. It's industrial waste. It causes cancer. People die from it every year, and people in this room, we could all die from these things, as well.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 73

Comment: Raising the air quality standards and then providing a loophole for industry facilities to put whatever they want into the air is just an ironic thing for the Environmental Protection Agency to do. This is a great chance to show off some of the innovative leadership, not bow down to mindless corporate greed. So yeah, saving corporations money is a terrible excuse to put the public's health at risk. Even worse, this is all industries taking no responsibility, be completely unregulated, and do whatever they want to our air. It is y'all's job to keep this exact situation from happening.

By making them unaccountable, you're directly making yourselves accountable. Is it somehow okay that at least 1,900 people will die every year because of your proposed loophole? Oh, yeah it is because you're saving industries money. I grew up in Baytown, Texas surrounded by refineries. The landscape was pretty bleak, but at least there was some pollution regulation. What I mean by that is, the sky was pink at night and the air smelled like absolute crap only sometimes. I can't imagine living in a town like that. My home town is the nearby industrial facilities had absolutely no regulation. I'll have lead and mercury, benzene, dioxins, and formaldehyde for breakfast. Why don't you throw in some severe asthma and cancer with that, too. Sorry if it's offensive, but it's the truth whether or not it's hard to swallow.

What I'm getting at, is that you're all in the position to do everything you can to stop these terrible things, so you need to do everything you can to stop them. You know, instead, you're proposing to allow facilities to burn waste in uncontrolled and unmonitored facilities. I'm pretty sure if you and your children lived in Baytown, Houston, or any similar area, you wouldn't even consider this ludicrous definition of solid waste to be acceptable.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 75

Comment: Toxic waste is still toxic waste regardless of what you do with it. The molecules that cause cancer and asthma, they don't care why they're being burned. That doesn't make them any less dangerous or any less likely to cause cancer or asthma or birth defects. It doesn't -- you know, it doesn't make it safer or cleaner when you burn these things; it just changes them. It puts them into the air, it doesn't -- yeah, it doesn't make them safer.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 83

Comment: Specifically, the American Lung Association urges the Environmental Protection Agency to strengthen the proposed ruleless for incinerators, and for the -- to narrow the definition of solid waste, which opens the huge loophole that threatens public health. We urge the EPA not to allow industry to burn waste in uncontrolled and unmonitored facilities. On behalf of children of developing lungs, kids suffering from asthma in our communities next door to these facilities, and adults whose health is so compromised they can't be here to speak.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 85

Comment: I'd like to provide a very brief background of the state tire program in Oklahoma.

The Oklahoma Waste Tire Recycling Act originally came into effect July 1st of 1989. The state legislature declared it a policy of the state to, quote, "Encourage recycling of used tires," end quote. As intended by the act, in the past ten years alone, Oklahoma has remediated approximately 280 illegal tire dumps removing almost 550,000 used tires. Initially, illegal tire dumps were very large. As the tire program has matured in the state, illegal tire dumps have become smaller because Oklahoma has more viable outlets for these used tires.

Annually, approximately 3.3 million used tires are processed and/or recycled in Oklahoma. The use of tires as a tire-derived fuel in cement kilns has led to a large percentage of used tires being processed, recycled and/or reused annually. Currently, cement kilns in Oklahoma account for approximately 1.85 million, which is almost 56 percent of Oklahoma's 3.3 million used tires annually.

As a result, the ODEQ requests that EPA leaves the use of whole tires and/or shredded tires as an attractive option for the cement kilns. Without cement kilns, Oklahoma could not recycle and reuse such a large number of used tires on an annual basis.

Without cement kilns, the number of illegal tire dumps would grow exponentially. Further, changing the definition of solid waste to include used tires that have been discarded; and used tires that have been discarded to be processed, with steel belting removed, would be disastrous in Oklahoma's tire program.

Over the years, various technical reports, some published by EPA, have supported the use of whole or shredded tires as TDF in cement kilns.

Throughout the rulemaking process, the EPA is appearing consistent regarding the combustion of used tires and cement kilns. The advance notice of the proposed rulemaking appeared to support the use of TDF in cement kilns. The preamble to the notice of proposed rulemaking appeared the same, though the text has changed and there are some inconsistencies.

EPA is not provided -- EPA is not provided an explanation of this change and/or any basis for the

change other than relying on the definition of discarded tires only. The ODEQ believes an exemption should be provided for state tire programs already in existence. Such an exemption would be straightforward and clear -- for such an exemption should be straightforward and clear. Such an exemption should be without a lot red tape and/or the petition process that's been identified as an alternative. State tire programs currently in existence should be grandfather into the rulemaking process. These programs have proven effective -- to be effective. Further the use of whole and/or shredded tires as a TDF should be encouraged by EPA, not discouraged or prohibited. The use of one ton of whole or shredded tires in cement kilns is the equivalent of 1.25 tons of coal combustion.

Further, when whole tires are combusted in cement kilns, the steel belting becomes a component of clinker replacing some or all of the iron required by the manufacturing process. Dealing with discarded tires and the force processing of whole tires only increases energy use across the board. If EPA disallows the combustion of whole or shredded tires in cement kilns merely because they were discarded, extra energy will not only be required in the processing of the whole tires, but also in the removal of the steel belts from used tires.

Even further, if crumb rubber is combusted in cement kilns, the iron component has to be reintroduced back into the kilns separately. Why require the removal of steel belts if they can be advantageous. How is that beneficial? The combustion of whole and/or shredded tires as TDF and cement kilns saves energy. The combustion of whole and/or shredded tires is economically feasible. If the recycling or reuse of tires as a TDF is prohibited as a result of this rulemaking, what is Oklahoma to do with their used tires? There is no benefit to the environment when illegal tire dumps increase exponentially and/or monofill landfills are required because they have to be created, as a result of the lack of use or beneficial use of the used tires.

With an increase of illegal tire dumps, there's also an increase of risk of fires, there's also an increase of diseased vectors. There's no benefit to EPA when it pushes the retirement of additional energy and the processing of the used tires when the whole or

shredded tire can be used without the processing. A review of the notice of public rulemaking appears to indicate EPA is pushing for increased use of coal and cement kilns.

EPA should be pushing for the use of alternative fuels that provide for recycling and reuse of used tires. Why disallow or hinder state tire programs that are currently working? State tire programs provide both environmental and economic benefits. Currently, effective state tire programs should be grandfathered and the state tire programs should be encouraged, not encumbered.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 87

Comment: The EPA needs to be clear that tire-derived fuel is a fuel and not a waste. Defining the classification of TDF based on wire content is arbitrary and does not relate to environmental impact. Our vendors that supply TDF as a boiler fuel are not able to meet the "relatively wire-free requirement." If TDF is considered a waste and not a fuel, we will potentially cease to use and replace about a 100,000 plus tons per year of TDF with coal at a significantly higher cost.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 92

Comment: I am here today to provide testimony on the proposed rule defining what non-hazardous secondary materials are solid wastes for purposes of regulation under Section 129 of the Clean Air Act. The proposed rule is important to ACC's Plastics Division because the plastics industry has a robust and long-standing commitment to supporting efforts to address end-of-life issues for plastics, and notably, we also promote the recycling of plastics as a valuable fuel source. We strongly support the use of non-hazardous secondary materials as fuel as a means to conserve resources and promote greater diversity of fuel sources.

For today's hearing, we would like to make three key points. First, plastics have a very high inherent fuel value. The BTU of plastics is higher than coal, which means that plastics that cannot be mechanically recycled should be used as fuel rather than being landfilled.

Second, markets are emerging which assess value to plastics as fuel source. Even in this difficult economic climate, we're seeing innovation and growth in conversion technologies that can take hard-to-recycle plastics and/or municipal solid waste and convert these to different forms of energy. Some technologies are converting municipal solid waste to a gas, others are converting plastics to a synthetic crude oil, and some existing companies are blending postconsumer plastics with biomass materials and using this fuel to displace coal and petroleum coke in cement kilns. In a draft report dated October 2008, for the EPA titled "Trends in Beneficial Use of Alternative Fuels and Raw Materials" for the Cement Sector, the use of plastics-based fuels are mentioned as promising alternatives to coal.

And third, the regulatory structure should not unduly burden the ability of the industry to look to plastics as an appropriate source of fuel.

ACC has been highly successful launching multiple programs to reuse and recycle plastics. We fully support EPA's general solid waste hierarchy or reduce, reuse, recycle, and energy recovery. Landfill disposition should be a last resort. As the U.S. EPA looks to identify which non-hazardous materials should be considered solid waste and which would be considered fuel, we support a regulatory regime that would not harm

the fledgling industry of producing fuels containing secondary plastics.

We see very strong benefits to expanding the recovery of energy beyond traditional waste-to-energy facilities and cement kilns, and ensuring that regulations are not so overly tightened that refuse derived fuels containing postconsumer plastics cannot remain a viable option for recovery energy at industrial and commercial boilers. As this nation rises to meet President Obama's challenge of becoming more energy independent, combating climate change, and promoting a more sustainable planet, we must not curtail potential markets for fuels that will simultaneously reduce the amount of valuable secondary materials going to this nation's landfills.

We have invested heavily in expanding recycling, but we are here today to state that it is critical that we continue to support sound regulatory policy that doesn't stifle innovation and energy independence.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 95

Comment: Although EPA's rule for major source boilers deserves applause, EPA's definition of non-hazardous solid waste is dangerous and irresponsible. By defining industrial wastes as "fuels," the proposal will allow all but a few facilities to burn spent chemicals, spent solvents, scrap plastic, industrial sludge, coal mining waste, used motor oil and other wastes in boilers and process heaters with no obligation to control or monitor their toxic pollution, and no obligation to report the identity and quality of their toxic emissions to EPA, state permitting authorities, or the public. EPA's proposal claims this result is

acquired by law. That claim is false. Lisa Jackson, you have the authority to bring the toxic emissions from these industry incinerators under control. Please do not allow industrial facilities to burn their waste in uncontrolled and unmonitored facilities. It exposes us to toxic pollution and deprives us of the right to know what pollution is.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 98

Comment: I'm not a scientist or an engineer, but, you know, I know that a discarded tire on the side of the road is trash and not fuel. There are other ways -- I've seen other ways that tires and other type of materials can be recycled into other more useful materials, not necessarily have to be burned. I -- I do realize something has to be done with them, but they don't necessarily have to be burned.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 103

Comment: We believe that EPA's definition of non-hazardous solid waste is woefully negligent. By defining industrial waste as fuel, the proposal will allow all but a few facilities to burn spent chemicals, spent solvents, scrap plastics, industrial sludges, coal mining waste, used motor oil, and other wastes and boilers and process heaters with no obligation to control or monitor their toxic pollution, and no obligation to report the identity or quality of their toxic emissions to EPA, state permitting authorities, or the public. Burning solid waste, shredded tires, scrap plastics, and

spent solvents can produce high levels of toxic air pollution including lead, mercury, benzene, dioxins and formaldehyde. This leaves many communities at risk from the severe adverse health effects that expose -- that exposure to toxic emissions can cause.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Julie Wainwright

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-1112

Comment Excerpt Number: 1

Comment: I am very concerned about the rising levels of pollution in all areas of our lives, especially air pollution. I recently learned that our neighborhood in Portland, OR., across the street from Grant High School, is in the 17th percentile for polluted air related to nearby industry. A study done by USA today using an EPA model ranked the air quality for schools across the United States. This model did not include the pollution from nearby freeway traffic so our air quality is even worse than the study would indicate. This is a nice neighborhood, so it was quite a surprise to read the study's results.

Now to hear that the EPA is proposing to loosen laws to allow plastic to be burned, seems completely misguided and really angers me. Please do your job to improve air quality, protect individuals and keep pollution of all kinds from contributing to our nation's rising health care costs.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: John M. Cullen

Commenter Affiliation: Masco Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-1471.1

Comment Excerpt Number: 2

Comment: All of our boiler operations are permitted by either the State or local regulators and we believe that none of the wood fuels used by our operations are solid wastes. The wood burned in our boilers is a dry, high Btu fuel. The resonated wood fuels used in our boilers are not "discarded" in normal operations but rather they are wood products generated from the manufacturing of cabinetry which are then used as fuel in our factories or are sold to other manufacturers as fuel. Resinated

fuels should be treated like any other traditional fuel and not be subject to further regulatory requirements.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Nathan McClure

Commenter Affiliation: Georgia Forestry Commission

Document Control Number: EPA-HQ-OAR-2006-0790-1287

Comment Excerpt Number: 2

Comment: Studies conducted by the National Renewable Energies Laboratory [Footnote: Spath, P. and Mann, M.; Biomass Power and Conventional Fossil Systems with and without CO₂ Sequestration – Comparing the Energy Balance, Greenhouse Gas Emissions, and Economics; National Renewable Energies Lab; 2004] have shown that wood diverted from waste streams into biomass-to-electricity direct-fired systems reduce greenhouse gas warming potential by 148% over coal-fired systems. While not usually landfilled, logging residues are left in the field to decay and release greenhouse gas emissions. EPA is proposing that all solid fuels be classified as solid waste. We do not agree that woody biomass from forest product manufacturing byproducts and logging residues should be classified as solid waste. However, if EPA concludes that wood biomass from mill byproducts and logging residues are in fact “solid waste”, then the logic of this proposal would also demand that all wood residues including logging residues should be considered the same as wood waste diverted from landfills, as listed in the NREL studies, when performing analysis for greenhouse gas impacts.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Allan Muller

Commenter Affiliation: Green Deleware

Document Control Number: EPA-HQ-OAR-2006-0790-1104

Comment Excerpt Number: 2

Comment: Action by the EPA is urgently needed to establish broad definitions of "solid waste" to include crop residues, "wood waste" including residues from timber harvesting, etc. Burners must not be allowed to escape significant regulation as "area sources".

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Jim Hickman

Commenter Affiliation: Langdale Forest Product Company

Document Control Number: EPA-HQ-OAR-2006-0790-1379.1

Comment Excerpt Number: 8

Comment: EPA should ensure that all forms of biomass are considered fuels, not wastes.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Susan Parker Bodine

Commenter Affiliation: Used Oil Management Association, UOMA

Document Control Number: EPA-HQ-OAR-2006-0790-1972.2

Comment Excerpt Number: 1

Comment: The Used Oil Management Association (UOMA) submits the following comments on the Environmental Protection Agency's (EPA's) Identification of Non-Hazardous Secondary Materials That Are Solid Wastes, Notice of Proposed Rulemaking, 75 Fed. Reg. 31844 (Jun. 4, 2010) (hereinafter NHSM NPRM).

UOMA is a trade association representing the manufacturers of used oil-fired heaters and small boilers that operate in accordance with the standards set forth at 40 C.F.R. 279.23. These products are designed to safely combust used oil in accordance with EPA's Used Oil Management Standards at 40 CFR Part 279. UOMA strongly believes that the used oil that fuels the units they manufacture is not a solid waste.

First, used oil, whether on- or off-specification, is a traditional fuel with a long history of being managed as a valuable fuel product.

Second, Congress, in section 3014 of the Resource Conservation and Recovery Act (RCRA), did not classify used oil as a waste material and instead established a separate regulatory program for used oil. As discussed below, under the Used Oil Management Standards, to prevent the environmental harm that can result from the improper disposal of used oil, EPA has created a regulatory structure that appropriately minimizes the regulatory burdens on persons who use used oil as fuel in space heaters and small boilers that is self-generated or collected from households that change their own oil (do-it-yourselfers or DIYers), while protecting human

health and the environment. If EPA erroneously concludes that used oil is a solid waste when used as a fuel then the careful regulatory structure established under section 3014 of the RCRA will be upset, the incentives for collecting used oil established under these regulations will be eroded, and improper disposal of used oil will likely increase. In fact, as discussed below, UOMA believes that any action by EPA to regulate used oil in a manner that discourages utilizing used oil for energy recovery will be environmentally harmful and a violation of section 3014 of the Resource Conservation and Recovery Act (RCRA), which states that: “The Administrator shall ensure that such regulations do not discourage the recovery or recycling of used oil, consistent with the protection of human health and the environment.” 42 U.S.C. 6935(a).

To ensure that used oil is not improperly classified as a waste, EPA must make changes to its proposed regulations. UOMA requests EPA to specifically identify all used oil as a traditional fuel in an Appendix to its new Part 241 regulations. In addition, to clarify the status of both traditional fuels and used oil, UOMA requests EPA to amend the definition of “secondary material” at proposed 40 C.F.R. 241.2 to add the following sentence: “The term secondary material does not include any material that is a traditional fuel or any used oil that is being managed in accordance with 40 C.F.R. Part 279.” To support these proposals, we first provide background information on the space heater industry, its customers, and the oil they burn. Second, we describe the statutory and regulatory framework that governs this industry. Third, we review the regulations, case law, and precedents governing the definition of solid waste under RCRA and conclude that used oil is not a solid waste. Finally, we describe the adverse environmental and economic consequences that would flow if EPA were to inappropriately regulate used oil as a waste under RCRA.

I. Space Heater Industry and Customers

UOMA members

UOMA members fall under NAICS code 3334. The Small Business Administration considers companies in this NAICS code to be small businesses if they have 500 employees or fewer (333414) or 750 employees or fewer (333415). 13 C.F.R. 121.201 All UOMA members are small businesses.

Space Heaters and Small Boilers

UOMA members manufacture space heaters and small boilers that are designed to meet the requirements of 40 C.F.R. 279.23. These units have a maximum capacity of not more than 0.5 million Btu per hour and are vented to the ambient air. Persons who generate their own used oil and/or who accept used oil from household DIY oil changers may utilize this used oil as fuel in these units with no obligation to test the oil or keep records to prove that the oil is on-specification.

These units are small and self-contained. Oil is stored in a tank adjacent to the unit and is pumped to the space heater or small boiler. Modern used oil heaters offer significant design improvements over models of the early 1980s. Early used oil heater technology used a

vaporization process which necessitated a burner pan at the bottom of the combustion chamber to collect the oil. Today's used oil heaters use an atomization process, relying on pressured air that forces fuel through a small nozzle and atomizes it into tiny droplets. The droplets are ignited electronically by a pair of electrodes. The oil is preheated, so that ignition can occur the moment the thermostat calls for heat, and the unit can be cycled on and off as required. All of the units are equipped with such features as flame-out sensors, fuel shutoffs and combustion chamber temperature controls. UOMA members endorse and use the Underwriters Laboratories rating for standards and testing methods. Used oil heaters are subject to UL 296A.

UOMA customers

UOMA customers typically are small businesses. UOMA sells oil-fired space heaters and small boilers to entities that service automobiles, trucks, and heavy equipment. These entities include automotive and motorcycle dealers that service new and used vehicles, general automobile repair facilities, the "quick lube" oil change industry, automotive recycling facilities, the construction industry (including road construction, building construction, and demolition companies), excavating contractors, landscaping contractors, logging contractors, marinas, bus transportation companies, and farmers. Our customers also include governmental entities including transit authorities; federal, state, and local operators of government-owned fleets, and the United States military. These customers generate their own used oil. Some UOMA customers, particularly those in the automotive service industry, also accept used oil from do-it-your-selves who bring the oil they have drained from their vehicles to a service station or other maintenance facility.

Usage information

This industry has recorded U.S. sales of approximately 143,000 used oil-fired space heaters and small boilers since 1992. Assuming 70% of those units remain in operation, we estimate that there are currently approximately 100,100 units in operation in the U.S.¹ Citing a Department of Energy (DOE) study, EPA's Used Oil Materials Characterization Paper says that 780 million gallons of used oil is used as fuel and 14 percent of that is used in space heaters. Based on those numbers, 109.2 million gallons of used oil are used in space heaters and small boilers annually. UOMA notes that the DOE report relied upon actually says 113,000,000 gallons of used oil is used in space heaters and small boilers and the basis for that data is a 1996 study by the American Petroleum Institute.² Based on the number of units UOMA believes are in operation, the volume of used oil utilized by space heaters and small boilers and small boilers may be higher than 113,000,000 annually, but we use that number in our discussion of the environmental and economic impacts, below.

The majority of that usage is in rural areas. One UOMA member conducted an analysis of its sales data for the last 16 years. These data demonstrated that customers who purchase used oilfired heaters are typically located outside of urban areas. Only 2% of this company's sales during this time period were to customers in major metropolitan areas.

Used oil characteristics

With these comments UOMA is submitting data to EPA analyzing samples of used oil collected from 55 UOMA customers in 2010. See URS Corp., Comparison of Used Oil Combusted in Space Heater and Small Boilers that Comply with the Used Oil Management Standards (Part 279 Rules), July 28, 2010 (hereinafter URS Analysis) (Attachment 1). These data demonstrate that the oil from all but two of these samples meets the used oil specification found at 40 C.F.R. 279.11. As discussed in the attached URS Analysis, we believe that the two off-specification samples are outliers that can be explained. See URS Analysis, at 1-2. Based on these data and based on the knowledge and decades of experience of UOMA members with the characteristics of oil that our units are designed to burn,³ we conclude that the vast majority of oil used by our customers is on-specification. Data analyzing samples of used oil from businesses in Ontario, Canada, provide further support. Of 230 samples collected in Ontario between 2005 and 2009, only four (1.7%) are off-specification. Specifically, four samples showed arsenic levels at 6.6, 5.1, 6.7, and 5.6 ug/g. See, Composite Analysis of Used Oil in Ontario, Canada, by Business Type. (Attachment 2).

1 UOMA notes that DOE has reported that the American Petroleum Institute estimates that there are 75,000 space heaters in use in garages. See DOE, Used Oil Re-refining Study to Address Energy Policy Act of 2005 Section 1838, at 9-4 (hereinafter DOE Study). However, as discussed above, UOMA customers include facilities other than garages.

2 See DOE Study, at 5-2.

3 UOMA manufactured used oil heaters typically are designed to use crankcase oil, automotive transmission fluid, hydraulic fluid, No. 2 fuel oil, and diesel fuel. In our experience, the vast majority of oil burned in these heaters is crankcase oil.

UOMA notes that EPA's Materials Characterization Paper estimates that 23% of used oil is off-specification. UOMA is certain that this statistic does not represent the oil used by UOMA customers. EPA's estimate is derived by averaging an estimate that 20% of used oil is off-specification provided by a representative of a trade association representing entities that recycle both industrial and automotive oils and the data from a Florida study that EPA says supports the proposition that 73.2% of used oil is off-specification. However, EPA appears to be using data from an earlier, 2006, version of the Florida study. The current version, a March 2007, Florida Department of Environmental Protection report on "Florida's Used Oil Recycling Program," is attached (Attachment 3). According to this report, in 2005, 162,310,571 million gallons of used fuel and oily waste were collected in Florida. Of that total, 44 percent was automotive oil, 18% was industrial, and 38% was mixed. Of the 122,341,001 million gallons reported as managed, 85% was managed as on-specification fuel and only 4% was managed as off-specification fuel.

EPA cites this report to support the proposition that 73.2% of used oils are on-specification. However, to make that assumption EPA not only uses old data, it also appears to be appears to be assuming that any used oil that is used for industrial use (11% in Florida) is necessarily off-specification oil. Used Oil Materials Characterization Paper, Mar. 18, 2010, at 4. UOMA disagrees that the percentage of oily material sent for industrial use in Florida has any bearing on what percentage of used oil used in space heaters and small boilers is on- or off-specification.

UOMA also strongly disagrees with the metals data from a 2003 study presented in EPA's Materials Characterization Paper. Used Oil Materials Characterization Paper, at 7. It is our

understanding that the data presented are based on only one sample. It clearly is not representative of used oil generally. If it were, all used oil would be off-specification. URS Corp. has provided a critique of these data. See Attachment 4.

UOMA understands that some industrial oils that contain chlorinated paraffin may routinely be off-specification. As UOMA customers only burn self-generated oil or oil collected from DIY'ers, none of the used oil utilized in space heaters and small boilers will be from industrial sources. Thus, data analyzing used oil from industrial sources cannot be used to characterize the used oil utilized by UOMA customers.

For self-generated oil, UOMA customers can use their own knowledge of the source of the oil to determine that it is on-specification. However, it is not out of the realm of possibility that some of the oil received from DIY'ers will be off-specification. That oil is generated by households and, to prevent the environmental damages discussed below, EPA and states strongly encourage its collection, rather than disposal. One of the ways EPA

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Susan Parker Bodine

Commenter Affiliation: Used Oil Management Association, UOMA

Document Control Number: EPA-HQ-OAR-2006-0790-1972.1

Comment Excerpt Number: 1

Comment: The attached comments set forth the legal and policy arguments that support UOMA's contention that used oil is not a solid waste and therefore units that burn used oil are not subject to the proposed CISWI rule. Specifically, whether on- or off-specification, used oil is a traditional fuel with a long history of being managed as a valuable fuel product. In addition, Congress, in the Used Oil Recycling Act of 1980, established a separate regulatory program for recycled oil. This program covers used oil that is burned for energy recovery, as distinguished from used oil that is discarded (and therefore a waste). See 42 U.S.C. 6903(37) and 40 C.F.R. 279.10(a).

If used oil-fired heaters are not CISWI units, EPA arguably could seek to regulate them under the Area Source Boiler rule. Proposed section 63.11237 defines a boiler as an enclosed combustion device in which water is heated to recover thermal energy in the form of steam or hot water. Space heaters do not meet that definition because they heat air, not water. However, UOMA members also manufacture small units that heat water with energy recovered from used oil. Arguably, those units would be subject to the proposed Area Source Boiler rule.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has

submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Robert H. Colby and G. Vinson Hellwig
Commenter Affiliation: National Association of Clean Air Agencies (NACAA)
Document Control Number: EPA-HQ-OAR-2006-0790-2022.1
Comment Excerpt Number: 4

Comment: Finally, in some instances EPA's various proposals provide for widely differing emission limits for similar units depending on the specific wording of the subcategories and the definition of solid waste. In the past, where large differences in cost and protectiveness are associated with definitions in the regulations, the result has been litigation and uncertainty over the meaning and application of those definitions in specific circumstances. Significantly more stringent CISWI limits will discourage the use of solid wastes in ways that will increase cost to industry while increasing emissions of greenhouse gases. Sections 112 and 129 each mandate that the emission limitation for covered units be "the maximum degree of reduction that is achievable," not merely the MACT floor. Accordingly, where feasible, EPA should adopt MACT limitations of similar stringency for similar units, irrespective of whether, for example, the source is regulated as an ICI Boiler under section 112 or a CISWI unit under section 129. This action, along with adoption of SO₂ and NO_x limits under EPA's contemplated Transport Rules (Phase II), would reduce the impact of litigation over the definition of solid waste and avoid potentially perverse and unanticipated environmental consequences associated with artificially encouraging or discouraging certain sources from combusting solid wastes. NACAA believes that corrections can be made within the court-ordered deadline that will permit adoption of lawful, sensible and protective limits for emissions of HAPs within these sectors. We also believe that it is better to "get it right" this time and would support a request to the plaintiffs for several months additional time to promulgate a final rule if EPA demonstrates that additional time is necessary to conduct the analyses that we recommend.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Steven Jarvis
Commenter Affiliation: Missouri Forest Products Association
Document Control Number: EPA-HQ-OAR-2006-0790-1477.1
Comment Excerpt Number: 9

Comment: The EPA has cited questionable data for hazardous air pollutants (HAPs), such as mercury and hydrochloric acid (HCL), contained in "clean" unadulterated wood. This data should be reexamined prior to the disqualification of wood as a traditional fuel. European data on these HAP emissions from unadulterated wood does not create significant inorganic emissions

during the combustion process, therefore using PM as a surrogate for non-mercury HAPs is unnecessary.

Analysis of bark and stemwood samples collected at 30 locations across the United States revealed that clean woody biomass fuels have potential mercury and HCL emissions considerably lower than the EPA limits for existing boilers.

MFPA requests that the EPA consult other scientific sources , like the National Council for Air and Stream Improvement (NCASI), for more information on the amount of lead, cadmium and mercury in green “clean” woody biomass prior to eliminating wood as a renewable fuel. Wood is a Clean AND Green Fuel! [Footnote 4: Potential Mercury and Hydrochloric Acid Emissions from Wood Fuels. Forest Products Journal 55(2): pages 46-50, February 2005.]

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Rich Raiders

Commenter Affiliation: Arkema Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1958.1

Comment Excerpt Number: 11

Comment: Legitimacy. For many years, EPA has struggled to distinguish between secondary materials and solid wastes. In its 2008 final rule (73 Fed. Reg. 64668), EPA published legitimacy criteria within the definition of solid waste (“DSW”) where owners and operators may determine if a secondary material meets a “secondary material” exclusion in 40 CFR 260.43. The secondary material exclusion removes the material from regulation as a hazardous waste. The proposed revised solid waste legitimacy criteria adopts the same substantive test for non-hazardous solid waste as exists today for hazardous wastes.

The first three criteria, useful contribution, value, and proper material handling, are appropriate to this inquiry. EPA appropriately proposed that any stream being combusted that contributes meaningful heating value to a combustion system meets the first prong. The presumptive 5,000 British Thermal Unit (“BTU”) per pound (“lb”) presumptive criteria appropriately identifies materials that should be considered a fuel instead of a waste. EPA also appropriately allows a case-by-case determination for secondary materials contributing less than 5,000 BTU/lb heat contribution to a combustion system.

EPA’s proposed value and material handling criteria are also appropriate criteria to evaluate secondary materials. Materials that are not valuable to the generator are legitimately solid wastes. If a generator cannot take reasonable steps to value the material as a product or raw material throughout the material life cycle, then the generator cannot legitimately claim that the material is valuable. Generators producing legitimate secondary materials should properly store, identify, inventory, and manage useful secondary materials.

However, the 2008 final regulation contains problematic language regarding hazardous constituent concentrations in proposed secondary materials. At 75 Fed. Reg. 31852, EPA proposes that “the product of the recycling process does not contain significant concentrations of hazardous constituents that are not in analogous products.” EPA inappropriately proposes to extend this concept, which was intended to address “toxics along for the ride,” to non-hazardous solid wastes. As these secondary materials are not hazardous waste, EPA should not be concerned about indirect hazardous waste generation absent a finding that combustion of these materials may generate hazardous waste, a finding missing in the DSW preamble. Before continuing any attempts to regulate non-hazardous secondary materials in a manner appropriate for the regulation of hazardous wastes, EPA should make a separate finding that residues of non-hazardous secondary materials could generate hazardous waste. Any further regulation should be based on specific risks from handling any such hazardous wastes.

EPA’s proposal to compare secondary material compositions to comparable fuel compositions is flawed. EPA proposes to utilize the hazardous air pollutants (“HAP”) at 42 USC 7412(b) or Appendix VII of 40 CFR 261 as a basis to compare secondary materials to comparable fuel materials. Many secondary materials contain concentrations of potentially hazardous organic constituents considerably different than what equivalent fuels may contain. For example, several Arkema streams potentially usable as secondary materials contain a variety of organic HAP not necessarily found in conventional #2 fuel oil. However the combustion device where these secondary materials may be used will consume the organic materials, HAPs and other non-HAP volatile organic compounds (“VOC”). After combustion, where well over 99% of the organics are destroyed in the combustion chamber, the amount of residual organic materials remaining in the vent stream is insignificant.

Likewise, the comparison between secondary materials and inorganic HAP is troublesome. The HAP profile of a typical #2 fuel oil may vary widely, based on where the oil was refined, what feedstock it was refined from, and what, if any, blending may have occurred during distribution. Given that the petroleum industry does not publish standard fuel oil metal and halogen HAP concentrations, generators of secondary materials are left to guess what concentrations of metal and halogen HAPs satisfy this condition.

EPA confuses the issue further by requiring secondary material generators to compare any secondary material to other materials combusted in a specific unit, rather than any comparable material. Newer secondary material combustors are specifically designed to combust the secondary material in the presence of a limited number of supplemental fuel choices. Arkema combusts liquid secondary materials in otherwise natural gas fired units in several locations. These combustors were not designed to combust any liquid fuels, or any materials other than the designated secondary materials and natural gas. EPA proposes that operators of such units must inappropriately demonstrate that the secondary material is functionally equivalent to natural gas, an impossible proposition. Any secondary materials criteria that forces a generator or an owner/operator to demonstrate that liquid streams meet any standard based on any gaseous stream is inappropriate and should be removed from any final regulation.

EPA should instead utilize the other regulations proposed as part of this regulatory package to address the secondary materials question. EPA seems to be concerned that secondary materials

combustion, no longer regulated under the CISWI standards at 40 CFR 60 Subparts CCCC and DDDD, could be combusted in unregulated sources. Some may believe that regulation under CISWI is critical to protect human health and the environment, and no other regulations would apply to combustion units firing secondary materials. Such units would not escape regulation under EPA Federal Register notices coincidentally published with this proposal.

EPA addressed this issue in the RCRA § 261.4 solid waste definition exclusions, specifically for scrap metal (§ 261(a)(13)), shredded circuit board (§ 261(a)(13)), and spent materials from metals processing (§ 261(a)(13)) materials streams. In these cases, owners and operators attempting to assert these solid waste exemptions must meet variations of the first three legitimacy criteria. However, EPA made no attempt to force any constituent-by-constituent equivalency, as proposed in the fourth prong of the non-hazardous version of the legitimacy criteria, in any of these exemptions. Exempting metals recovery and burnoff oven operations from the definition of solid waste, so long as they meet the three-prong non-hazardous legitimacy criteria, meets EPA's solid waste regulatory goal of appropriate cradle to grave management.

EPA should resist regulating the content of non-hazardous secondary materials. By proposing the fourth prong pollutant equivalency test, EPA severely restricts the number, type, and amount of secondary streams that may be combusted in boilers. This rule will cause a large number of facilities to cease combusting legitimate secondary materials, increasing fuel combustion from traditional sources, and significantly increasing the amount of industrial solid waste disposal in the United States. Congress did not intend this result. Senator Dole testified in the Senate negotiations leading up to the Clean Air Act Amendments ("CAAA") of 1990 that the Senate wished to provide "flexibility so that [solid waste] incineration can be used in an appropriate manner." (136 Cong. Rec. S3757, April 3, 1990) Congress intended solid waste incineration rules to decrease the total solid waste requiring land disposal, not increase the solid waste disposal problem. EPA contradicts its solid waste reduction mandate with the material equivalency proposal. EPA should keep the first three prongs of its proposed solid legitimacy test, and abandon the comparable fuel concentration prong.

Clean Air Act Conformance. Separately, EPA should further clarify that materials meeting the CAAA § 129(g) statutory exemptions from commercial solid waste combustion are secondary materials in proposed § 241.3(b). Congress specifically excluded metals recovery related combustion, certain small power generation and co-generation units, and air curtain incinerators from regulation under CISWI standards. Congress specifically required EPA to not evaluate materials co-located with recoverable and/or recovered metal substrates as solid wastes. The chemical industry, of which Arkema is a member, typically operates two types of metal recovery units where the input stream should not be considered a solid waste.

The first metallic stream subject to recycling after thermal treatment is metallic catalysts and filter media. In many applications, a company will use a metallic material, often alumina, nickel, or precious metal based, to assist with a manufacturing or emission control process. Many of these substrates may be thermally regenerated and recycled. This regeneration process often requires residual (typically organic) materials to be thermally melted, desorbed, or pyrolyzed (thermal desorption in an oxygen depleted atmosphere) from the metallic matrix. Owners and

operators design these systems to avoid actual combustion on the metallic matrix to extend the metallic matrix service life. Many of these systems require surface activity, and combustion on the face of the metal could reduce surface activity, reducing the value of the underlying metallic material. EPA should find that residues on metallic derived matrices, including a variety of metal bearing catalysts and/or filter media, are not solid wastes when being thermally recovered for recycling.

The second metallic stream subject to recycling after thermal treatment is metallic parts undergoing maintenance. In many applications, a company will use a thermal technology to clean a metallic part when other cleaning technologies may not be appropriate or may damage the part. The underlying part is never considered solid waste, because it is in the process of being returned to service in a manufacturing application. Instead of handling as bulk metals, these parts are handled individually by the owner/operator. Otherwise, the process of removing metal for cleaning, thermally removing (typically organic) materials from the metal, and returning the metallic material to service is the same for loose metal, metallic catalyst mounted to a substrate, and whole metal parts. Just as EPA should not consider residue on a catalyst bed a solid waste, it should not consider residue on a solid metal part a solid waste. Please see our upcoming comment in docket EPA-HQ-OAR-2003-0019 for additional details concerning this process.

Point of Generation. This approach described above, where a metal bearing material that is being cleaned for reuse, is consistent with existing EPA point of generation regulations and policy. At 40 CFR 261.2(a), EPA regulations describe several situations where materials exiting processes are not solid wastes. § 261.2(e) describes how recycled materials are not solid wastes when managed in a certain manner. Recycled materials that are not “used in a manner constituting disposal,” burned for energy recovery, speculatively accumulated, or specific inherently waste-like materials, are not considered hazardous wastes by EPA. Here, the metal stream, either in bulk or as equipment parts, is a valuable commodity, needed for reuse in the process. As the metal stream is not intended for disposal, EPA cannot regulate regeneration of these materials as waste combustion per Clean Air Act § 129.

At 40 CFR 261.4(c), EPA designates that materials are not subject to hazardous waste regulation “until it exits the unit in which it was generated,” typically known as the point of generation. As the only waste generated from the metal recovery or burnoff oven process is any residue generated during reclamation, the point of generation is ash recovery, not metal recovery or parts cleaning. This situation is analogous to the 40 CFR 261.4(a)(17) spent materials exemption from solid waste regulation typically used by minerals processors. In the exemption, a spent material is not a solid waste if it is legitimately recycled to recover valuable materials, the spent material is not speculatively accumulated, and the spent material is managed as a valuable product. This exemption captures the essence of the legitimacy criteria above. EPA should adopt the same approach when addressing metals recovery operations and burnoff ovens for this regulation. These furnaces recover metals for reuse, the materials are valuable to the operator, and the materials are managed as valuable. EPA appropriately restricts listed hazardous waste generation from this exemption, and requires operators to describe to the Administrator how the handling systems fit the exemption. EPA should adopt his approach in lieu of the proposal, amending the § 261.4(a) language to promulgate a clarification exempting metals recovery and burnoff ovens

from the definition of solid waste. Such an exclusion would fully harmonize RCRA solid waste regulations with Clean Air Act statutory requirements.

Arkema understands that, were the process to generate a characteristic or listed ash waste, that the owner or operator would be required to comply with RCRA Subtitle C hazardous waste provisions. However, EPA already possesses appropriate authority to regulate hazardous wastes, and this proposal does not and cannot change those requirements. Here, even if the process residue were hazardous, the cleaning process itself would not be regulated under RCRA, just the residue management practices that follow the cleaning process.

EPA should use its existing point of generation concept to delineate that metal recovery and burnoff oven processes do not manage waste, but manage valuable materials intended for recovery and reuse.

Consequences. Misapplication of the DSW regulation could have substantial unintended consequences, potentially damaging a wide variety of industrial operators. Were EPA to not clarify that compound-by-compound comparable fuel evaluations are not necessary, facilities would be unable to combust alternate fuel streams. This outcome would bring the same fate as EPA's first attempt to promulgate hazardous DSW regulations in the last decade, where the rules were so onerous as to be unusable.

Misapplication of the § 129 metal recovery and burnoff oven exemption from solid waste management would cause most of the United States plastics industry to throw away valuable polymer management equipment, such as extrusion dies, molten plastics conditioning parts, pumps, valves, and pipes. EPA proposes that burnoff oven operators could blast (water or grit) parts as an alternate cleaning practice. However, the plastics industry must maintain dimensional stability of the parts now subjected to burnoff oven cleaning.

Any attempt to hand clean, blast, or otherwise apply physical force to finely machined extruder parts renders the parts useless and scrap. Some of these parts cost tens of thousands of dollars to fabricate to very fine tolerances, and are not replaced easily. Many are custom built for the individual extruder, and may not be able to be replaced but for custom manufacturing at great expense.

We also considered resuming methylene chloride parts washers as a replacement technology, but reject that option for several reasons. First, EPA heavily regulates halogenated parts cleaning systems, with good cause. Halogenated solvents used for parts cleaning are very toxic, many suspected or known carcinogens. Industry does not take a decision to unnecessarily expose its employees to unnecessary toxic environments lightly. First, halogenated parts cleaners are expensive to operate, require significantly additional care to maintain, and create emissions not easily managed. Second, condensers do not adequately recover halogenated organic vapors in these processes, mostly because the required freeboard around the units force operators to collect a significant amount of dilution air in recovery systems. Combusting residual post-condenser emissions is problematic because the halogens in the process stream create hydrochloric acid as a combustion product. This acid gas forces operators to purchase upgraded thermal oxidizers and post-combustion scrubber systems to recover the acid before the final process vent. Third, halogenated solvent cleaning systems are not known to clean some polymers, specifically variations of nylon, from metal parts. Many polymer manufacturers, including Arkema, produce nylon varieties, and thus cannot use halogenated solvent cleaning technologies. For these

reasons, because we do not believe that EPA intends polymer manufactures to scrap valuable equipment parts and that no other technology exists to replace burnoff ovens, EPA should consistently define solid waste management at the point where an operator manages residue from metals cleaning processes.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Steven Jarvis

Commenter Affiliation: Missouri Forest Products Association

Document Control Number: EPA-HQ-OAR-2006-0790-1477.1

Comment Excerpt Number: 15

Comment: As EPA's proposed rule acknowledges, the courts have made it clear that the EPA's authority to regulate solid waste is limited to materials that are discarded. In Missouri, over 97% of all sawmill and other primary processing mill residues are currently being used as a product (chips for paper, sawdust for animal bedding, etc.) or as a fuel for the production of power and/or heat. In fact, sawmills and other forest products mills supply 74% of their own energy needs from woody biomass and receive up to 15% of their revenues by selling wood residues for fuel and other secondary products. It is unlikely that these mills will be able to stay in business without the opportunity to burn wood as a fuel for renewable energy production.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Morris Mantey

Commenter Affiliation: Clean Burn, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1912.1

Comment Excerpt Number: 1

Comment: The attached comments set forth the legal and policy arguments that support Clean Burn's contention that used oil is not a solid waste and therefore units that burn used oil are not subject to the proposed CISWI rule. Specifically, whether on- or off-specification, used oil is a traditional fuel with a long history of being managed as a valuable fuel product. In addition, Congress, in the Used Oil Recycling Act of 1980, established a separate regulatory program for recycled oil. This program covers used oil that is burned for energy recovery, as distinguished from used oil that is discarded (and therefore a waste). See 42 U.S.C. 6903(37) and 40 C.F.R. 279.10(a).

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Eileen Sottile

Commenter Affiliation: LKQ Corp

Document Control Number: EPA-HQ-OAR-2006-0790-1782.1

Comment Excerpt Number: 1

Comment: LKQ TIRE DERIVED FUEL (TDF) AND USED OIL FUEL RECYCLING. LKQ processes over 465,000 vehicles annually. This figure equates to roughly 2.3 million scrap tires that, if they cannot be recycled for consumer's use, are processed as TDF. Indeed, 2,430 tires, when converted to TDF, can supply enough energy to power one home for a year.

LKQ Corporation regards TDF as a valuable fuel resource. The automotive recycling industry has worked with state and local governments for years to deal with the age-old dilemma of waste tire stockpiles to come up with an economically viable solution in the automobile recycling industry. As the largest automobile recycler in the nation, one of our goals is to promote the recycling of EVERY aspect of the automobile. It would be environmentally counter-productive if, after years of progress dealing with waste tire stockpile issues, EPA discouraged this important recycling market by the imposition of overly stringent emission standards on Area Source boilers when combusting such recycled fuel sources. If users of TDF stop burning TDF and convert to coal or other fossil fuels, emissions of global warming precursors will increase. In addition, significant quantities of tire will be sent to sanitary landfills which will shorten their useful life. Recycling tires into energy has decreased pollution emissions as well as significantly reduced health hazards in this country.

The same reasoning applies to the recycling of used oil fuel for energy recovery. As part of our operations, LKQ goes to great lengths to ensure that every fluid is removed from the automobiles we recycle to prevent their introduction into the local environment. Under both state and federal guidelines, used motor oil must be drained to prevent entering the land or storm water systems. Among other things, LKQ burns used oil fuel on-site for heat recovery in lieu of virgin fuel, and introduces used oil fuel into the used oil fuel processing market.

As is the case with TDF, overly stringent emission limitations on Area Source boilers that burned used oil fuel for energy will discourage this important recycling program and could cripple it altogether. LKQ believes it would be poor environmental policy to establish emission controls that would actually increase the likelihood of entities choosing not to collect and recycle used oil, which in turn would increase the odds of placing responsibility for the management of this material on non-licensed individuals rather than responsible, registered automotive recyclers. Such a policy change would only increase the odds of the improper disposal of an otherwise valuable energy source.

In short, the practical impact of improper and overly stringent emission standards for Area Source boilers that recycle these fuel materials in lieu of virgin fossil fuels would be environmentally counter-productive. LKQ urges EPA to evaluate these adverse environmental impacts as it evaluates development of the final emission standards under this rulemaking.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Morris Mantey

Commenter Affiliation: Clean Burn, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1912.1

Comment Excerpt Number: 3

Comment: At a minimum, EPA must interpret section 112 of the Clean Air Act in a manner that does not conflict with section 3014 of the Resource Conservation and Recovery Act (RCRA), which states that: “The Administrator shall ensure that such regulations do not discourage the recovery or recycling of used oil, consistent with the protection of human health and the environment.” 42 U.S.C. 6935(a). To avoid this conflict EPA should exempt small boilers from regulation under section 112 of the Clean Air Act by establishing a regulatory threshold that is higher than the .5 million Btu/hour capacity limit established under 40 C.F.R. 279.23. Such an exemption also would be protective of the environment because it would allow users of used oil fired boilers to continue to accept used oil from household do-it-yourself oil changers. As discussed in the attached comments, if persons are no longer able to burn used oil due to regulatory compliance costs under the Clean Air Act, then improper disposal of used oil by household do-it-yourself oil changers is likely to increase, threatening our Nation’s waterways and undermining the goals of the Clean Water Act.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Stephen E. Woock

Commenter Affiliation: Weyerhaeuser Company

Document Control Number: EPA-HQ-OAR-2006-0790-1984.1

Comment Excerpt Number: 15

Comment: EPA declined to address de minimis quantities of non-hazardous secondary materials in the proposed solid waste definition rule [75 FR 31844]. We believe this is not practical or

realistic and places facilities at compliance risk even for accidental or inadvertent presence of miscellaneous materials in a stockpile or storage bin of biomass fuel. EPA should address an exclusion for de minimis materials combusted in boilers and process heaters.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 66

Comment: As previously stated, the Forest Products Industry burns many fuel types, including purchased and onsite generated biomass, wastewater treatment system residuals, tire derived fuel (TDF), and creosote treated wood. These fuels are used at both major and area sources. Use of these fuels is critical to our operations and to managing fuel costs. Certain of these fuels also help with combustion efficiency, specifically reducing CO emissions. TDF can be used as a low moisture supplement to high moisture biomass fuels as a strategy to reduce CO emissions (the data set provided for the long term variability discussion in Appendix 4 contains examples which illustrate this). Consequently, this fuel and others being evaluated under the Non-Hazardous Secondary Material Definition may important to Section 112 compliance strategies in the future. Consideration of fuels that may be cross referenced in multiple rulemaking efforts at EPA is important.

The Forest Products Industry is closely following the development of the definition of non-hazardous solid waste in hopes that many of the materials that are currently burned as fuels are not classified as wastes, which would force facilities to either landfill these materials currently being burned as fuels and further increase energy costs, or force facilities to unnecessarily install expensive air emissions controls under the solid waste incinerator regulations. We have submitted separate comments on the proposed definition of non-hazardous secondary materials that are solid waste and we incorporate those comments by reference.[Docket ID No. EPA-HQ-RCRA-2008-0329] EPA made the statement in the proposal:

"EPA does not believe that the boilers subject to this rule combust any nonhazardous secondary materials, whether they are considered a solid waste or not. If you are aware of such materials being combusted at these boilers, please provide specific information as to the type of secondary material being combusted and at what type of facilities and in what quantities." (FR 31899)

AF&PA does not have detailed data on the quantities of materials that, in the Non-Hazardous Solid Waste rule, are currently being considered non-hazardous secondary materials (not waste) like resinated wood fuels. However, we are quite certain that these materials are being burned in area source boilers and would expect that a survey would reveal that other non-waste secondary

materials, such as “urban” wood, construction and demolition residuals, and used oil, are being combusted in area source boilers as well.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: William Turley

Commenter Affiliation: Construction Materials Recycling Association

Document Control Number: EPA-HQ-OAR-2006-0790-2132

Comment Excerpt Number: 1

Comment: We are heartily disappointed that the EPA is not recognizing the common sense and scientifically valid viewpoint that it doesn't matter what fuel goes into the boiler, it matters what emissions come out the stack, and has instead chosen to evaluate fuels based on their content. While some such evaluation is valid, to make it the only criteria, instead of emission results, is focusing on the wrong outcome. For human health and safety, all that should matter are emissions. If the energy generating facility was designed to accept material such as C&D biomass, or any other alternative materials for that matter, and could not accept “traditional” fuels, the legitimacy criteria should not be applicable.

Underlying all the technical points we are making in these comments is the fact that biomass made from C&D wood is a major financial underpinning of the entire Building-related C&D recycling industry. This proposed rule has the potential to undermine the entire building-related C&D recycling industry to the point of near extinction. The reason for that is there are limited potential market options for much of the wood from the C&D stream except as a fuel product. Wood makes up as much as 40% of the incoming stream to these facilities. Most of it is not of the quality to make added-value products such as panelboard. The best any one can do is recover the Btu value. Virtually banning its use will not spur development of new markets, that is not physically possible, but send the material to a landfill. And expecting other processes, such as reuse and deconstruction to fill the void, is naïve at best. Most of the wood is not suitable for reuse, and the stock that is is dwindling every year. The cost of deconstruction is far more than demolition and recycling, when all costs are taken into consideration. Indeed, has EPA performed an economic impact statement for what it is going to cost to send all this wood to a landfill, including the negative effect it will have on the C&D recycling industry? Has the agency completed a life cycle analysis for putting all of this carbon into landfill methane into the environment? Saying that we can just recover the methane for power generation is a grossly inefficient method compared to the use of C&D wood as a biomass. The best option for both the environment and the economy is C&D recycling, which relies on a boiler market for its C&D wood biomass product.

A study performed by the University of New Hampshire in 2007 (“Life-Cycle Assessment of C&D Derived Biomass/Wood Waste Management”) showed that the use of C&D wood as a fuel product reduces greenhouse gas emissions. That is because the use of the wood replaces some traditional fuels, especially coal and natural gas. If the latter two had been left in the ground, they

would have never released their GHGs; no matter what, if the wood had stayed in the forest and died or ended up as a fuel product, it will have released them. Using C&D wood fuel saves on GHG emissions.

The proposed rule lists traditional fuels as being exempt from consideration. One of those fuels is natural wood. As C&D wood as biomass has been in use for boilers for more than 15 years, it should be considered a traditional fuel.

The C&D wood biomass product is, of course, made of that natural wood, is a cellulosic biomass, and should be similarly exempt. In fact, as a fuel it is easily as good if not better than natural wood because it has been dried and does not have the 30% or so moisture content of virgin wood. If EPA does decide to follow its “bright line” minimum requirement of 5000 btu/lb, C&D biomass is rated between 7000 to 8200 on that scale, much better than natural wood.

That an alternative fuel must have meaningful heating value is only one of the three criteria the agency cited in making its decision on what is a fuel and what is solid waste. The other two are handled as valuable commodity and contaminants not significantly higher than the traditional fuel it is most similar to. In addition, the agency wants to see the material is processed in steps that make it into a fuel product. This last one first.

C&D wood is received at a mixed C&D processing facility as part of loads from construction and demolition sites. On the tipping floor the material is examined in a variety of methods, including XRF analyzers and simple eyeballing material to remove any obvious contaminants. The removal of potential contaminants as much as possible before it enters the plant is part of every facility’s basic operating rules, let alone its permitting requirements.

Then the wood, along with other materials of value, are separated out from the rest of the incoming stream one of two ways; either through mechanical means or through humans sorting along a specially built picking line. The other materials include concrete, metals, plastics, asphalt shingles, etc., all found in the building- related waste stream. After separation, the wood is ground to a specific size and density per the specification of the plant using the biomass product. Indeed, the creation of natural wood products follows a similar processing path, except that C&D wood is more carefully prepared than virgin wood fuel because of the chemical analysis the C&D product undergoes. We invite any interested party to tour a C&D recycling plant to see how the process is performed.

Another criteria EPA has is does the fuel have value? C&D wood does. Its end market value is usually between \$25 to \$30 a ton, but that changes throughout the country. Finally, the question of contaminants. In a study from 2006, “Emissions from Burning Wood Fuels Derived from Construction and Demolition Debris”, by NESCAUM, the Northeast States for Coordinated Air Use Management, which is made up of top officials in governmental air quality agencies eight northeastern states), “a review of the data shows that the use of appropriately processed C&D wood is similar in its emission profile to that of virgin wood and other power generation fuels such as coal and oil.” Strict fuel standards are a must, the report adds, and that “fuel standards minimizing contamination from other C&D materials and removing C&D fine material (known as “fines”) from the fuel chips increases fuel quality substantially, resulting in lower metal and other air toxic emissions. Finally, requirements for comprehensive testing and sampling of the fuel at both the processing facility and the location of the end user will assure that the fuel quality is maintained.”

This relates to the last criteria, contaminants. C&D wood coming into a recycling facility can contain lead from lead-based paint, and certain treated woods have arsenic and other contaminants cited in the proposal. That is why most facilities have some kind of quality control

for incoming material. Most painted wood and all treated woods are removed. That is both regulatory and market driven as the boilers already have limits on how much contaminants they can release. Those end markets for C&D recyclers can only accept minor amounts of such contaminants. Any recycler whose material exceeds those limits is soon cut off from that market. The boiler cannot take the chance of a contaminant or an excess of unallowed emissions to ruin his business. Fortunately, as stated above, current C&D recycling processing techniques remove most of the dangerous substances, such as removing the fines after grinding, which is where the paint ends up. Because C&D wood so closely resembles natural wood in virtually characteristics, including in contaminant levels, it should be considered the same as the traditional fuel and be exempt from this proposal. Further support for this comes directly from the proposal: "Recycled fuel products no different from recycled paper and aluminum cans...if non- hazardous secondary materials are disposed, but are later collected, segregated and processed into a homogeneous fuel product that is marketed and are no different than traditional fuels used today, then they should no longer be considered solid waste, just as recycled paper is not a solid waste." As there is little chemical difference between C&D wood biomass and natural, they should be considered the same.

A contaminant point we do question is the proposed arsenic limit, which is about One-quarter of that found in natural cedar bark. But under this proposal the natural wood will be exempt while C&D wood would not be. Also, to meet the proposed standard, C&D recyclers would have to somehow commute the laws of nature and physics in order to make the product cleaner than nature created it. We contend that is impossible.

The CMRA also questions the proposed petitioning process on several fronts. First, this will be a costly step for wither the C&D recycler or the boiler to undertake, a large and unnecessary expense making it economically unfeasible for C&D wood to compete in the marketplace. Second, C&D wood has proven itself in the marketplace and in the opinion of many state environmental agencies. Why should it have to go through this process again at a newly created bureaucracy at the federal level? Related to that, this bureaucracy could undermine the current standards that have been set by each state, which have already set up their own type of petitioning process through their permit apparatus.

Related to that is the question of fuel pellets made from wood waste, including C&D wood. The two main markets for that wood, which is ordinarily the cleanest of the clean wood, are commercial furnaces and residential stoves. We are asking for clarification if these are covered by this proposal, and if so, how.

Two other alternative proposals are listed by EPA in the document. Both would eliminate boiler fuel as a market for C&D wood, virtually closing down the C&D recycling industry in the United States. Hence, both proposals should be discarded with prejudice.

Summary

C&D biomass is a carefully processed fuel product that provides superior heating value to its closest traditional fuel, and is strikingly similar in chemical composition to natural. Its contaminant level is already controlled by the marketplace and the fact that before processing C&D recyclers take careful steps to remove as much incoming contaminants. The material is sold to energy generating facilities, recyclers do not pay to bring the material there. C&D wood is virtually the same material as natural wood, and should be treated the same including making it exempt from the solid waste designation.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arnold Schwarzenegger

Commenter Affiliation: Governor of the State of California

Document Control Number: EPA-HQ-OAR-2006-0790-1777.1

Comment Excerpt Number: 10

Comment: CalRecycle supports the efforts of U.S. EPA to promote the safe and effective use of non-hazardous secondary materials as fuels or ingredients in the industrial processes involving combustion. CalRecycle supports the prevention of sham recycling and speculative accumulation as these improper activities have resulted in significant hazards to public health and the environment. However, while we understand that U.S. EPA needs to be consistent with past legal determinations regarding discard and the definition of solid waste, we urge U.S. EPA to use its discretion to amend the proposed rule to recognize the benefits of using certain secondary materials as fuel or ingredient. We believe such action is justified from both an air quality perspective, and a resource perspective to preserve our nation's lands and meet our energy needs.

Review of the proposed rule has revealed that there may be unintended consequences that have potentially adverse affects on California's efforts to increase diversion of solid waste from landfills and to promote the recovery of low carbon fuels and energy from solid wastes. The rule as drafted adversely impacts our efforts to promote the use of conversion technologies to produce fuel or electricity from solid wastes and our waste tire diversion program. U.S. EPA can mitigate these adverse impacts by amending the proposed rule as suggested below.

The Scope of the Rule Impacts Small Business' Ability to Reuse Wastes

The proposed regulatory approach requires that the secondary material is under the control of the generator and complies with the legitimacy criteria to ensure that the material is not handled as a waste and is a truly beneficial fuel or ingredient product. CalRecycle staff agrees that this approach may work well for waste generated by large companies, but using only this approach eliminates similar legitimate uses for wastes generated by residences and small businesses since they are unable to maintain control of their wastes. We would support development of a regulatory approach that addresses wastes generated by residences and small businesses and that promotes legitimate and environmental protective reuse of wastes.

Landfill Gas/Biogas/Biofuels

On Page 31856, U.S. EPA is asking for comments on whether landfill gas and biogas should be considered a 'traditional fuel'. CalRecycle agrees with U.S. EPA's finding that the composition of these gases is similar to natural gas. On Page 31855, U.S. EPA states that biofuels are viewed as legitimate fuel products. We believe the basis for the determination that biofuels are considered a traditional fuel is also applicable for landfill gas and biogas. The consequence of

not considering these as a traditional fuel would be adverse affects on the marketability for these gases as fuel. This would reduce the demand for these fuels, which will result in increased flaring of landfill gases and thus waste a valuable resource. The proposed rule places the responsibility on the end user of the gas to establish that landfill gas or biogas meets the definition of a traditional fuel based on its chemical composition. Lastly, the consideration of landfill gas or biogas as a solid waste appears to be inconsistent with the hazardous waste regulations where uncontained gases are not regulated.

CalRecycle supports the identification of landfill gas and biogas as a traditional fuel in the final rule or as a finding in the final preamble.

Waste Tires

Approximately 40 million tires are generated annually in California. Approximately 75 percent of these waste tires are diverted from land disposal and are re-used in construction projects (e.g., rubberized asphalt concrete paving and tire derived aggregate (TDA) light weight backfill), landfill application (e.g., TDA in aggregate landfill gas collection systems and, as alternative daily cover), and as fuel. About nine million tires annually are used as fuel (primarily in cement kilns).

Although the use of waste tires as a fuel is not CalRecycle's preferred alternative for the reuse of waste tires, the use of waste tires as fuel and "ingredient" in cement kilns constitutes a beneficial use of these waste tires and accounts for a significant portion of the diversion rate. However, the proposed rule poses significant problems by requiring the processing of waste tires so that the steel belts are removed, in order for waste tires to be considered a legitimate fuel. The three cement plants now burning tires as a fuel in California would be treated as solid waste incinerators under the proposed rule, and because processing costs would increase, may elect to not burn waste tires. If the three plants were to stop taking the tires, the diversion rate in California for tires may be reduced significantly from about 75 percent to about 55 percent, resulting in more landfill disposal, and the potential for stockpiling or illegal disposal of tires. U.S. EPA is proposing this rule change even though the preamble for the rule recognized that cement kiln emissions are lower when burning tires as fuel instead of coal, that the metal in the steel belt is needed to make quality cement, and life cycle analysis indicates that lower greenhouse gas emissions result from burning tires when compared to coal. It appears that the proposed regulatory approach does not consider the situation when a secondary material has a dual benefit as an ingredient and a fuel.

In response to the question on Page 31878, CalRecycle recommends that the final rule contain a provision for waste tires used as fuel in a cement kiln to not be considered a solid waste and supports any effort by U.S. EPA to adopt an additional definition for processing that would not require the metal belts to be removed from tires or the tire be shredded when the waste tire is used in a cement kiln.

Ability to Petition for a Non-Waste Determination

The proposed rule allows a petition to the U.S. EPA Regional Administrator for a non waste determination. CalRecycle supports the ability to seek a case-by-case non-waste determination due to the unknown number of situations that may be affected by the adoption of the proposed rule. On Page 31880, U.S. EPA asks for comments on allowing states to handle the petition determination process. States are more knowledgeable about solid waste activities within their respective state, have programs in place to promote safe and effective management of solid wastes in lieu of land disposal, and have the resources for regulating solid waste facilities and landfills. CalRecycle supports allowing states to handle the petition determination process for non-waste determinations.

How Long Should Fuels be Held Before Use

CalRecycle does not believe there is a single answer to the question on Page 31881, of how long fuels are generally held before they are used. Fuel storage varies by industry and in some cases State requirements. For example, in the case of waste tires at cement plants, California statutes provide for a maximum of a one-month supply of waste tires at a cement plant (based on the monthly consumption during the previous year). If the facility stores more tires than this limit it must obtain a waste tire storage permit and be subject to regular inspections.

The Proposed Rule is Unclear on How On-Going Activities Will be Addressed

The proposed rule does not address if an on-going activity that would be subject to the new rule would need to be stopped while a petition is filed and processed. Activities should not have to cease if they are meeting all existing State and Federal requirements while U.S. EPA acts on a petition that is filed within a reasonable time. The rule should include a provision for U.S. EPA (or states if delegated the authority) to accept and act on petitions within a reasonable time frame. In addition, CalRecycle staff recommends that the rule be amended to provide for a type of 'interim status' until the U.S. EPA Regional Administrator or State acts on a petition.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Martha E. Rudolph

Commenter Affiliation: Colorado Department of Public Health and Environment

Document Control Number: EPA-HQ-OAR-2006-0790-1979.1

Comment Excerpt Number: 7

Comment: The proposals also limit the ability to use non-traditional fuels generated by homeowners or small businesses. Many non-hazardous secondary materials that may be used as a fuel are generated by homeowners and small businesses. The requirement that the combustion unit stay within the control of the generator (in these cases the homeowner or small business) is not feasible. This will remove any incentive to develop uses for wastes from these groups as a

fuel, even if the waste is superior from an air emissions perspective when compared to the traditional fuel.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Christopher Harris

Commenter Affiliation: NORA, an Association of Responsible Recyclers

Document Control Number: EPA-HQ-OAR-2006-0790-2011.1

Comment Excerpt Number: 1

Comment: NORA, An Association of Responsible Recyclers, Inc. (“NORA”) submits the following comments on a rule proposed by the U.S. Environmental Protection Agency (“EPA”) entitled Identification of Non-Hazardous Secondary Materials That Are Solid Waste. 75 Fed. Reg. 31844, et seq. (June 4, 2010).

NORA is a national trade association, founded in 1984, whose members collect, recycle, and market used oil throughout the United States. NORA members produce on specification and off specification used oil fuel products and re-refine used oil to produce lubricants and feedstocks for lubricants. Over the past twenty-five years NORA and its member companies have participated in all EPA rulemakings affecting used oil, including the development of the used oil management standards (now codified at 40 CFR Part 279) as well as numerous state regulatory proceedings.

NORA’s principal policy objective in addressing legislation and regulation affecting used oil is to enhance environmental protection via rational regulatory controls and a market-based recycling system. It should be emphasized that in September 1992 when EPA promulgated the final rule adopting the second phase of the used oil management standards (which, inter alia, established additional regulatory controls governing on specification and off specification used oil fuels), the Agency stated: “EPA has determined that used oils that are recycled do not pose a substantial threat to human health and the environment when they are managed in accordance with the standards promulgated today from the time they are generated until they are recycled in addition to the existing requirements under other statutes or regulatory programs.” 57 Fed. Reg. 41602 (September 10, 1992). This determination by EPA remains accurate. Moreover, nothing in the proposed rule indicates that environmental protection would be enhanced by applying the proposed restrictions on used oil. To the contrary, as demonstrated below, the proposed rule when applied to used oil will have numerous detrimental effects that the Agency appears not to have considered in this rulemaking.

NORA has frequently stated that the key to a market-based recycling system is the fact that used oil constitutes a valuable commodity. When the quantity of water is the same, used oil fuel and virgin oil fuel have approximately the same heating value (17,800 BTUs per pound¹). Consequently used oil fuel products are competitive with their virgin oil fuel counterparts as well as coal.

However, unlike virgin oil, “[t]here are no pipelines, supertankers, or gusher wells to supply used oil. It must be collected in small quantities from hundreds of thousands of generators distributed across the country in the same concentration as the general population.” John J. Nolan, et al., *Used Oil: Disposal Options, Management Practices and Potential Liability* (3rd ed. 1990) p. 29. While the primary incentive for collecting the billions of gallons of used oil that the United States generates each year is profit, the collection and recycling system can only function effectively if the used oil retains its inherent value. That value can be significantly diminished, if not destroyed, when well meaning but imprudent regulatory controls wreak havoc with used oil fuel markets. When that occurs, the absence of demand would inevitably result in great quantities of unwanted used oil – used oil that is continuously being generated. A similar threat to the used oil market system (caused by the proposal to classify used oil as a hazardous waste) was evaluated by EPA in 1986. The EPA-sponsored study concluded that designating used oil as a hazardous waste would cause an additional 61 to 128 million gallons to be disposed of improperly each year. See Temple, Barker & Sloan, Inc., *Analysis of Possible Market Impacts of Resulting From Stigmatizing Effects of Listing Recycled Oil* (November 1986); 51 Fed. Reg. 41900, 41902 (November 19, 1986).

NORA’s approximately 250 members would be directly and adversely affected by the rule EPA proposes to promulgate, particularly those components of the proposed rule that address the scope and definition of solid waste and impose greater regulatory burdens on managing used oil fuel.

II. Discussion

A. Congress Has Enacted Legislation Directing EPA To Encourage Used Oil Recycling.

The United States Congress has focused its attention on the management (and mismanagement) of used oil and directed EPA to adopt regulations that encourage legitimate methods of used oil recycling. The first national law on this subject, enacted thirty years ago, was intended to provide specific authority to EPA to protect public health and the environment by promoting used oil recycling. The Used Oil Recycling Act of 1980 required EPA to issue regulations governing used oil management and to “ensure that such regulations do not discourage the recovery or recycling of used oil.” In the Congressional findings provision of the Act, the fundamental precepts of this legislation were expressed as follows:

The Congress finds and declares that

- (1) used oil is a valuable source of increasingly scarce energy and materials;
- (2) technology exists to re-refine, reprocess, reclaim and otherwise recycle used oil;
- (3) used oil constitutes a threat to public health and the environment when reused or disposed of improperly; and that, therefore, it is in the national interest to recycle used oil in a manner which does not constitute a threat to public health and the environment and which conserves energy and materials.

42 U.S.C. 9601.

The legislative history of the Used Oil Recycling Act of 1980 also makes clear that Congress believed that the “recycling of used oil will result in the conservation of a valuable resource as well as diminish the likelihood of posing a threat to the public health and the environment N. 1415, 96 th

if disposed of improperly.” H.R. Rep. Cong., 2d Sess.

10 (1980). According to the Senate Environment and Public Works Committee, “[t]he purpose [of the Used Oil Recycling Act] is to encourage safe reuse of used oil in the United States and discourage improper burning or disposal of such oil.” S. Rep. No. 879, 96th Cong., 2d Sess. 1 (1980). The Used Oil Recycling Act of 1980 contains a definition of “recycled oil” that has important implications for this rulemaking. “Recycled oil” is

defined as “any used oil which is reused, following its original use for any purpose, including the purpose for which the oil was originally used” and “includes oil which is re-refined, reclaimed, burned or reprocessed.” 42 U.S.C. 6903(37).

Sections 5 and 6 of the Used Oil Recycling Act of 1980 directed EPA to provide technical and financial assistance to states to address “the economic and institutional impediments to the recycling of used oil.” Section 9 directed EPA to conduct a comprehensive study of the used oil recycling system and the energy savings attributable to recycling. [EPA never initiated this study.] Frustrated with EPA’s failure to adopt or even propose a used oil regulatory program, Congress in 1984 passed legislation designed to assure that the Agency would implement its legislative mandate on used oil. The legislative history of the 1984 amendments to RCRA state that “where protection of human health and the environment can be assured the [EPA] Administrator should make every effort not to discourage recycling of used oil.” H.R. Rep. 1133, 98th Cong., 2d Sess. 114 (1984); See also H.R. Rep. 198 (Part 1) 98th Cong., 1st Sess., 64 (1983). EPA has recognized that this “statute contains a separate provision dealing with used oil as a distinct class and authorizes separate standards for its management (See RCRA section 3014).” 50 Fed. Reg. 49175.

Senator John Chafee, the floor manager of the RCRA reauthorization bill (S. 757) in the Senate and the chairman of the conference committee on the 1984 RCRA Amendments, described the used oil recycling provisions of the 1984 legislation as “a careful effort to balance the stringent environmental requirements of this legislation against the practical experience of businesses that are already engaged in successfully recycling material that would otherwise be harming the environment.” According to Senator Chafee, the used oil recycling industry “has demonstrated how a potentially hazardous substance can be safely collected and profitably recycled into new, useful products.” 130 Cong. Rec. S. 9193 (daily ed. July 25, 1984).

Following Congress’ 1980 and 1984 legislative instructions, EPA established a set of balanced regulatory controls that, for all practical purposes, accomplished Congress’ goals. [As previously noted, when EPA promulgated the second phase of the used oil management standards in September 1992, the Agency stated: “EPA has determined that used oils that are recycled do not pose a substantial threat to human health and the environment when they are managed in accordance with the standards promulgated today from the time they are generated until they are recycled in addition to the existing requirements under other statutes or regulatory programs.” 57 Fed. Reg. 41602 (September 10, 1992).] NORA members collect and manage vast quantities of used oil as a valuable product – now at 279. [In the proposed rule EPA explicitly states: “We note that today’s proposed rule does not change any of the regulations in place that regulate on-spec used oil.” 75 Fed. Reg. 31864, fn. 34.]

in compliance with EPA’s regulations codified 40 CFR Part 11, instead of a balanced regulatory approach, used oil had been declared a hazardous waste, as had been seriously considered, far less used oil would be recycled and the system for handling used oil would be extremely expensive – without any environmental protection benefits. The history of used oil regulation in

the United States provides a valuable lesson and blueprint for policy makers who genuinely care about environmental protection.

To further promote the recycling of used oil, Congress in 1986 adopted the “Service Station Dealers Exemption.” This provision provides a conditional exemption from potential prospective liability under CERCLA (Superfund) for entities such as car dealers and service stations that comply with all applicable environmental laws (including used oil generator regulations under 40 CFR Part 279) and provide a collection service for “Do-It-Yourself” (“DIY”) used oil generators. 42 U.S.C. 6914(c).

Taken together, the statutory provisions focusing on used oil establish a clear Congressional mandate to EPA: used oil warrants special regulatory treatment that encourages proper recycling. In light of the legislative history that confirms used oil’s unique place in the tapestry of environmental regulation, it is EPA’s obligation not to disregard Congressional intent. That intent was clearly expressed by Representative Ike Skelton (author of the Service Station Dealers Exemption) in comments on EPA’s pending used oil regulatory scheme. Rep. Skelton observed: “overregulation in this particular situation can severely undermine the basic goals of environmental protection.” 132 Cong. Rec. H9569 (daily ed. Oct. 8, 1986). Accordingly, in the context of the present rulemaking affecting used oil, it would be a substantial error for the Agency to ignore Congress’ clear and specific directives on used oil. As demonstrated below, the Agency’s proposal to classify off specification used oil as a solid waste and require combustion only in the relatively few facilities that have obtained section 129 permits would devastate the recycling system for off specification used oil fuel and thereby “severely undermine the basic goals of environmental protection.” If EPA were to adopt the Alternative Approach D compelling all used oil to be incinerated in section 129- permitted facilities D this action would, of course, create a widespread environmental disaster. Congress was right to recognize the direct link between an effective market-based system for properly recycling used oil and environmental protection. EPA would be right in heeding Congressional intent.

B. Used Oil, Including Off Specification Used Oil fuel, Has Value, Is Not Discarded, And Cannot Be Classified As A Solid Waste.

In pertinent part, the Resource Conservation and Recovery Act (“RCRA”) defines the term “solid waste” to mean “any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities” [Emphasis added.] 42 U.S.C. 1004(27).

In construing this provision of RCRA the United States Court of Appeals for the District of Columbia Circuit ruled that Congress “clearly and unambiguously” intended the phrase “other discarded material” to have its ordinary meaning. *American Mining Congress v. EPA*, 824 F.2d 1177, 1193 (D.C. Cir. 1987). According to the Court, the ordinary meaning of “other discarded materials” are materials that are “disposed of, abandoned or thrown away.” [Webster’s Seventh New Collegiate Dictionary defines “discard” as “to get rid of as useless or unpleasant.” The Oxford English Dictionary defines “discard” as “to get rid of (someone or something) as] In that case the Court made clear that EPA’s regulatory authority was not expansive; to the contrary, it was strictly limited to a narrow definition of solid waste. *Id.* The Court reaffirmed its holding that Congress intended a narrow definition of solid waste in *Association of Battery Recyclers v. EPA*, 208 F.3d 1047, 1054, 1056 (D.C. Cir. 2000). (“Congress unambiguously expressed its

intent that 'solid waste' -- and therefore the scope of EPA's regulatory authority -- is limited to materials that are 'discarded' as a result of being disposed of, abandoned, or thrown away." EPA has stated its agreement with the D.C. Circuit on this question: "[T]he ordinary plain-English meaning of the term, 'discard' controls when determining whether a material is a solid waste." The ordinary plain-English meaning of the term discarded means "disposed of," "thrown away," or "abandoned." 75 Fed. Reg. 31856. In situations where a given material could reasonably be determined to be either discarded or not discarded, EPA must demonstrate that its decision is founded upon "reasoned decisionmaking." *American Petroleum Institute v. EPA*, 216 F.3d 50, 56-58 (D.C. Cir. 2000). Moreover, the burden is on EPA to explain why a material is discarded "if EPA wishes to assert jurisdiction." *Id.* at 58.

The Court of Appeals for the District of Columbia Circuit has also pointed out that the fact that a person transfers a material to a third party does not mean that the material is discarded or that such materials contribute to solid waste disposal problems. Such transfers may, in fact, be a good indicator that a company values the material. See *Safe Food and Fertilizer v. EPA*, 350 F.3d 1263, 1268 (D.C. Cir. 2003). This is certainly true of used oil where EPA's design of the used oil management standards is premised on physical transfers of used oil (and related transactions) involving generators, collectors, marketers, processors and end-users such as burners. In the present rulemaking, EPA has recognized that secondary materials "may often be used to produce a safe fuel product that is a valuable commodity and is sold in the no longer useful or desirable." The American Heritage Dictionary defines discard as "to throw away." The term "abandoned" is the "voluntary relinquishment of ownership." *Commonwealth v. Koontz*, 258 Pa. 64, 67-68 (1917). "There can be no such thing as abandonment in favor of a particular individual or for consideration. Such act would be a gift or sale..." *Id.*

marketplace no differently than traditional fuels." 75 Fed. Reg. 31859. The Agency has also specifically stated that "used oil is a valuable resource because it has lubrication value and heat value." Because it has heat value, it can be burned as fuel. Burning the used oil keeps the heat value from being wasted and saves the virgin heating oil that would have been burned instead. Because virgin oil is a limited resource, properly managing used oil so that its lubrication value and heat value is not wasted is very important." Office of Research and Development, EPA, Environmental Regulations and Technology: Managing Used Motor Oil (December 1994), p. 5. In the preamble to the regulations adopting the 1985 used oil management standards EPA explicitly stated that when a fuel is recycled it is not discarded. [EPA's exact language is as follows: "But when a commercial chemical fuel [EPA used the example of gasoline] is recycled (e.g. mixed with used oil and burned for energy recovery), it is not discarded (within the meaning of the rule) and so it is not a hazardous waste. See section 261.33 (July 15, 1985) and 50 FR 618 (January 4, 1985)." 50 Fed. Reg. 49719 (November 29, 1985).]

The value of used oil has long been recognized by both the generator and the collector. John J. Nolan, et al., *Used Oil: Disposal Options, Management Practices and Potential Liability* (3rd ed. 1990) pp. 33-38. Collectors generally pay the generators for the used oil [According to EPA's Materials Characterization Paper on used oil, recyclers [or collectors] pay between \$0.60 and \$1.07 per gallon of used oil. Seep. 9.] and typically have long-term contracts for the sale of the used oil. Fuel processors and re-refiners compete for the generators' used oil. In northern states many generators have space heaters and use their own used oil as a heating fuel. As demonstrated by the attached statements of several entrepreneurs, [see Attachment A [See

submittal for Attachment].] the used oil fuel industry has been “economically viable”[EPA has indicated that when secondary materials become “economically viable” they become “traditional fuels.” 75 Fed. Reg. 31856. NORA contends that used oil fuel and the recycling industry that produces it have been “economically viable” for many decades. See Attachment A [See submittal for Attachment].] for many decades.

Moreover, EPA’s used oil management standards (codified at 40 CFR Part 279) draw a clear distinction between used oil being disposed of and used oil destined for recycling.

Indeed EPA’s regulations presume that used oil is destined for recycling (and therefore not a waste). 40 CFR 279.10(a). In light of these basic and unquestioned facts about the value of used oil it cannot be maintained that used oil is abandoned, discarded or thrown away. Moreover, in light of the Agency’s many previous pronouncements on recycled materials, it is highly inconsistent for EPA to label any used oil destined for recycling as “discarded.”

An additional solid waste criterion that EPA has not considered in this rulemaking is whether the materials in question may be considered part of the “waste management problem.” Materials that are part of the waste management problem would be considered discarded or solid wastes. See *American Mining Congress v. EPA*, 907 F. 2d 1179, 1186 (D.C. Cir. 1990). In EPA’s fuels” rule [Although EPA has recently withdrawn the “comparable fuels” rule, it did not do so on any issue relating to its discussion of waste management problems quoted above. Consequently, EPA’s quoted observations on fuels not becoming waste management problems remain valid and applicable to the Agency’s proposed rule concerning non-hazardous secondary materials.]

discussing “comparable the Agency pointed out that it had established “conditions to assure that burning of comparable fuels will not become part of the waste management problem. The chief condition is limitation on burning to industrial furnaces (as defined in 260.10), industrial and utility boilers, and hazardous waste incinerators.” 63 Fed. Reg. 33784 (June 19, 1998). Because existing regulations (set for th in 40 CFR 279.12(c)) already r

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Susan Forbes

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-1251

Comment Excerpt Number: 2

Comment: I am deeply concerned that your agency’s proposed Solid Waste Definition Rule will allow untold numbers of facilities across the United States to burn scrap plastics, used chemicals, and other industrial wastes without emission controls, air monitoring, or reporting requirements. This will create unacceptable risk for communities across the country, who may be exposed as a result of this rule to unconscionable levels of toxic air pollution that can cause cancer and other serious health effects.

The EPA is setting a dangerous standard and damaging its reputation as a protector of communities by proposing to exempt facilities that burn waste on-site for energy recovery from the strong Clean Air Act protections that Congress intended to apply to all waste burners.

The same scrap plastics, used chemicals, and other industrial wastes that this proposal would allow to be burned on-site without meaningful controls would undeniably be regulated as "solid waste" if shipped off-site and burned in an incinerator. To call these wastes "fuel" and thereby exempt them from highly protective standards for controlling, monitoring, and reporting emissions amounts to regulation by semantics, an utterly irresponsible approach that jeopardizes the health of my family, friends, and neighbors.

Municipal waste incinerators, medical waste incinerators, and hazardous waste incinerators recover energy from combustion but are all subject to the Clean Air Act's protective rules for waste combustion. Facilities that burn industrial waste shouldn't be treated any differently, regardless of where or why the waste burning is taking place.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Sherilyn Coldwell

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-0072

Comment Excerpt Number: 3

Comment: I encourage EPA to discard its overly narrow definition of "solid waste" for purposes of these rules, which allows many waste-incinerators to escape the stringent regulations prescribed by the Act. In light of the health dangers posed by waste incineration, EPA should ensure that all facilities burning waste are subject to the most effective available controls.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Martha E. Rudolph

Commenter Affiliation: Colorado Department of Public Health and Environment

Document Control Number: EPA-HQ-OAR-2006-0790-1979.1

Comment Excerpt Number: 4

Comment: The proposals will hinder the use of biofuels, biogas and biomass (woody and agricultural) by triggering more stringent air requirements when burning those materials in traditional and renewable energy heat and power generation projects.

Landfill gas and biogas are sustainable fuel sources that should be harnessed for use as a viable fuel. Gaseous fuels are being produced from the collection of landfill gas and from proposed projects using anaerobic digestion of organic containing solid wastes to generate methane, creating a renewable energy source. The State agrees that these gaseous fuels are comparable to traditional fuel products⁵. If landfill gas and biogas are not considered traditional fuels, the combustion unit using landfill gas or biogas may be designated a solid waste incinerator and subjected to more burdensome CISWI standards, even though the composition of these gases are similar to natural gas. Under that scenario, there is little incentive to harness and utilize the fuel source. The associated biogas would then continue as a source of fugitive emissions, containing 50-80% methane. [See submittal for references.] Also, under the proposed rule, it is unclear who determines if the gaseous fuels are managed as a valuable commodity and have meaningful energy value (see comment 5). The State recommends that the rule contain specific provisions to recognize these as traditional fuels, not solid wastes.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: C.A. Vandersteen

Commenter Affiliation: Louisiana Forestry Association

Document Control Number: EPA-HQ-OAR-2006-0790-2246

Comment Excerpt Number: 5

Comment: The solid waste definition rule as proposed would re-classify many materials now being burned to recover energy from fuels to solid wastes, necessitating that plants become solid waste management facilities and meet the more stringent incinerator emission standards. For example, the use of biomass, a renewable energy source, would be curtailed as facilities choose other, less expensive management methods. EPA should carefully evaluate whether the risks associated with burning these materials justifies their reclassification as solid wastes.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: John Hopewell

Commenter Affiliation: American Coatings Association

Document Control Number: EPA-HQ-OAR-2006-0790-2062.1

Comment Excerpt Number: 10

Comment: EPA states that it believes that the boilers subject to the area source NESHAP do not combust any non-hazardous secondary materials, whether solid waste or not. In the companion proposal for the “Identification of Non-Hazardous Secondary Materials That Are Solid Waste” , EPA identifies “used oil” as a non-hazardous secondary material fuel. EPA goes on to propose that “on-specification used oil” is a “traditional fuel” (i.e. it is not a solid waste when combusted) but that “off-specification used oil” is a solid waste when combusted.

In the support document for the secondary material rule, EPA identifies the amount of used oil that is generated and combusted annually as 780 million gallons. EPA lists the following industry classifications as used oil generators:

1111 Crop production
2212 Electric services
2212 Electric and other services combined
3242 Petroleum and coal products
332, 3332 Special industry machinery
3331 Metal working industries
333, 3362 Construction machinery and equipment
4212 Scrap and waste materials
4451 Grocery stores
484, 488, 492, 493, 5622 Motor freight transportation and warehousing 7131 Boat marinas
8111 Automotive repair shops
8111 Fleets
8111 Vehicle service stations
8141 Private households
5621 Waste Management and Remediation Services

There are certainly “boilers” in use in each of these classifications. It is probable that some of these boilers are combusting used oil. EPA should therefore incorporate this situation into the promulgated version of Subpart JJJJJ.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Martha E. Rudolph

Commenter Affiliation: Colorado Department of Public Health and Environment

Document Control Number: EPA-HQ-OAR-2006-0790-1979.1

Comment Excerpt Number: 10

Comment: The waiver process regarding solid waste determinations should be clarified and streamlined, and should give state agencies the authority to make waiver decisions. As it currently is proposed, this process will be severely complicated by the complexity of determining whether a material is solid waste for both air and for solid waste purposes, the fact that these determinations may differ between air and solid waste programs, the anticipated volume of

determinations on this matter, and the liability of incorrectly deciding Boiler/Process Heater MACT or CISWI applicability.

EPA recognizes that many states have programs in place to make non-waste determinations under state solid waste statutes. EPA should allow the states to make case-specific non-waste determinations under the Definitions Rule without the need to obtain EPA approval.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Tim W. Sonnichsen

Commenter Affiliation: Sonnichsen Engineering, LLC

Document Control Number: EPA-HQ-OAR-2006-0790-2139.1

Comment Excerpt Number: 12

Comment: Should wastes from biomass be considered as “solid wastes” under RCRA legislation?

I am not a lawyer and am frankly very confused on all of the definitions being proposed to “define” solid wastes. But, having worked on numerous solid waste “incineration” projects over my career, it is clear to me what is and what is not wastes that can generate HAP’s.

Potentially hazardous materials are formed when man steps in. Pristine forest materials and agricultural biomass wastes contain very low concentrations of what are considered as hazardous materials. Some of these materials are trace metals needed to sustain the life of the tree. Man has burned these materials for hundreds of thousands of years for his energy needs. These practices continue to today in many areas of the world.

Modern man has, in some cases, modified the chemical nature of these naturally occurring forest materials to suit his own purposes such as treating them with toxic elements (arsenic, chromium, etc.) to kill other organisms that could naturally decompose the wood, or by adding binding materials to restructure wood that has been broken down by man. So man is the problem, not the naturally occurring biomass materials.

A simple definition of what is a “dangerous” biomass solid waste is therefore any biomass that has been treated with hazardous materials. Biomass generated from wood products or agricultural operations that has not been so treated should not be considered hazardous.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Martha E. Rudolph
Commenter Affiliation: Colorado Department of Public Health and Environment
Document Control Number: EPA-HQ-OAR-2006-0790-1979.1
Comment Excerpt Number: 12

Comment: The regulatory impacts of these rules may take effect sooner than EPA anticipates because the Definitions Rule implementation schedule is unclear. It is unclear whether or not the Definitions Rule requirements apply earlier than the Boiler/Process Heater MACT, Area Source Boiler Rule and CISWI proposals. Thus materials may need to be diverted much sooner than the applicability dates of the Boiler/Process Heater MACT, Area Source Boiler Rule and CISWI in order to comply with the effective date of the Definitions Rule. In that event, permitting revisions to authorize the change in materials burned would be necessary.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Commenter Name: Lee B. Zeugin
Commenter Affiliation: Utility Air Regulatory Group
Document Control Number: EPA-HQ-OAR-2006-0790-1957.1
Comment Excerpt Number: 29

Comment: Inexplicably, EPA does not propose to allow use of either of the most recently promulgated federal reference methods for Hg -- Method 30A - Determination Of Total Vapor Phase Mercury Emissions From Stationary Sources (Instrumental Analyzer Procedure) and Method 30B - Determination Of Total Vapor Phase Mercury Emissions From Coal-Fired Combustion Sources Using Carbon Sorbent Traps (in 40 C.F.R. Part 60, Appendix A). Because EPA has provided no explanation for the exclusion, UARG assumes this was an oversight and asks that the methods be included in the final rule. Although UARG is sensitive to the fact that EPA did not rely on any data from those methods in setting the proposed limits, UARG notes that EPA had sufficient confidence in the technical validity of the methods to promulgate them by direct final rule and that no relevant adverse comments were received. 72 Fed. Reg. 51,494 (Sept. 7, 2007). Moreover, as part of its evaluation of the methods, the Agency examined data comparing Method 30B to both Method 29 and the Ontario-Hydro Method and concluded that the "sorbent trap-based technique coupled with appropriate performance criteria and QA procedures can provide Hg emissions data of quality comparable to that produced by the Ontario Hydro Method." Id. at 51,497. If EPA does not include these methods in the final rule, EPA must provide a reasoned explanation for the exclusion and provide further opportunity to comment.

Response: This comment pertains to the Identification of Non-Hazardous Materials That Are Solid Waste and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the Identification of Non-Hazardous Materials That Are Solid Waste rulemaking docket, the response to this comment will be provided there.

Out of Scope: CISWI

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 5

Comment: The concerns we have raised on the Boiler MACT rule also apply to EPA's proposed 129 standards for CISWI.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 7

Comment: Our 1976 biomass boiler has been listed as a CISWI unit due to our use of urban wood and EPA is expecting it to perform according to the CISWI limits, yet our real-life performance data has been left behind. In an attempt to see what equipment would be needed to run our biomass boiler under the new CISWI rules, we have consulted with our engineers and some equipment suppliers. We are told these standards are technically unfeasible. In fact, our Green Energy Cogeneration project is now at risk. As EPA has pointed in the draft CISWI rules, it's expected no new CISWI units to come on line. This is not MACT.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 10

Comment: My name is Jim Mullooney. I'm a chemist. I have almost 25 years' experience in the hazardous waste business, and at one point I did own a RCRA hazardous transfer facility.

Currently I'm the President of Pharmacycle, and I'm commenting on the CISWI regulations.

Just quickly, what Pharmacycle does is we collect human excrement from patients that are on OSHA regulated chemotherapy drugs. Sounds kind of gross, but it is kind of gross.

So, why would we do that? We'll get into that a little bit.

And the title of my presentation, which usually takes over an hour -- I'm going to condense it -- is called Drugs Are Chemicals, Too.

So, the EPA, and industry and people, in general, for the past 30 years have divided pharmaceuticals and industrial chemicals into two different categories. Pharmaceuticals being medicines and good for the environment and good for people, and industrial chemicals being bad and nasty, which is kind of -- if you look at what the chemical structures are, most industrial chemicals are designed to not react with the environment -- paints, coatings -- they're designed to be resistant to the environment -- where a pharmaceutical is designed to have a specific effect on the human body.

So, we really should care what happens with these pharmaceuticals. And with these regulations on solid waste, I know from personal experience that if it was not a RCRA hazardous waste, we sent it to a non-RCRA landfill or to a non-RCRA incinerator across the board.

Anything came in, easiest way make sure it's not a RCRA which was from 1976. So regulations haven't quite kept up with the amount of chemicals that have been invented in the last 20 or 25, or 35 years.

So this regulation we have 165,000 pharmaceuticals coming into an incinerator, and we're testing for nine that come out, which it's impossible to test for all the chemicals that come out, but there are some common sense things that we need to look at.

The types of chemicals that we at Pharmacycle handle are OSHA regulated hazardous drugs. I don't know if anybody's familiar with the OSHA Hazardous Drug Policy. Most of these drugs are cytotoxic drugs. Most of the treatments are for chemotherapy. These chemicals were invented during World War II as chemical warfare agents, and they're now used to treat cancer.

And the way these drugs work is that being cytotoxic, they'll break into the cancer cell; they'll attack the DNA; and they'll break off the chromosomes. So when the cancer cell splits, it's been mutated. We no longer have a cancer cell. What we have, we really don't know, but we've cured cancer.

If it's a hair cell, it's no longer a hair cell. We've cured hair. Your hair falls out. And it works on skin cells and fast-growing cells.

So, there's an issue with how nasty these chemicals are. We have -- some of the pictures I like to use is -- this is a picture from Chemical and Engineering News; and it's a guy in a spacesuit making a chemotherapy drug called doxorubicin. So we've got guys in spacesuits that make these pharmaceuticals.

We have pharmacists that are in Level 3 biological safety cabinets that are not allowed to be exposed to these materials preparing the drugs at a dose at some points that are at the nanogram per liter. I'll get back to that in a minute.

So once this is prepared, the nurse is given a splash shield and gloves and a hazmat suit and injects it into the patient where the patient is sent home to excrete the -- most of the medicine.

The analogy I like to use is if you take a vitamin and you haven't taken a vitamin in awhile and you go to the bathroom a couple hours later, it looks like you ate your highlighter. Well, that's the vitamin passing through your body unaltered. That happens with any sort of a pharmaceutical -- anything you take.

So if you've got a drug that has a very low absorption rate like a cytotoxic drug that's being made by a guy in a spacesuit, handled by a pharmacist in a Level 3 biological safety cabinet, handled by a nurse in a hazmat suit, injected into the patient, we should care what happens to this drug all the way through the process.

The guy in the spacesuit has a suit contaminated with materials. It's not a RCRA regulated drug. Where does it go? Solid waste incinerator. The pharmacist -- I don't know how you make a nanogram per liter -- there is no real scale. What you'd do is you'd start with a known amount of the material; then you dilute it. It's called serial dilutions.

So that pharmacist in the Homer Simpson-like glovebox is diluting this material to a nanogram per liter or a part per trillion. What happens to those dilutions? Well, it goes to solid waste incinerators. It's not regulated.

The tubings, the pipes -- they go to incineration. So we have a chemical that is so toxic that the absorption rate is less than one percent, and it's administered at a nanogram per liter.

An analogy I like to use is if you had a trillion one dollar bills and you stacked it like a deck of cards and you turned it sideways, the trillion would go from Boston to the middle of Ohio. And you take that one part per trillion and you inject it into a patient, and only one cent gets into the body. And that one cent that gets into his body makes his hair fall out and nearly kills him. Ninety-nine percent of it passes through the body. We should care what happens to this chemical all along the process. That's why we at Pharmacycle, we collect the sheets that get sweat and your shirts and materials that -- and your urine and your feces, and we do not send them to a solid waste incinerator because we don't know what's coming out the other end.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 31

Comment: It's unconscionable to me that we have processes where we're going back to incineration -- we're actually going back to incinerators. We've had a very difficult time over the years with these power plants and these incineration devices in our community.

It's with the utmost respect but, at the same time, with a lot of fear and trepidation that I suggest to you that you hold back on allowing these boilers to do what you intend for them to do.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 32

Comment: Under CISWI other alternate materials that presently that we use as fuel would have to be disposed of differently -- again causing us to increase our use of fossil fuel, increase our costs, and put us at a much more competitive disadvantage with the rest of the world.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 35

Comment: We have a question about exemptions. In Section 60.020, which cites Section 129 of the Clean Air Act, it appears to our reading that QFs -- QFs meaning Qualifying Facilities of which renewable power generators are members may be exempt from this. So we pose that as a

question. Our readings haven't clarified that at all. All of our biomass plants are, in fact, qualifying facilities.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 49

Comment: It is a fairly strong misnomer to believe that or to assume that because a facility is operating in a particular demographic or geographic location that the people who live in closest proximity to that facility necessarily work in that facility or have any economic benefits. That's a widely held misunderstanding. And just because a facility is in a location doesn't mean that the people who live closest to it work in that location and have some economic benefits.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 59

Comment: I'm Dr. Mark Mitchell. I am President of the Connecticut Coalition for Environmental Justice, and I'm an environmental -- and a public health physician.

I wanted to talk a little bit about Connecticut. In Connecticut we have the highest percentage of our trash burned of any state in the country. Over 81 percent of our trash is incinerated in trash energy incinerators.

These incinerators are disproportionately located in low-income communities and in communities of color. The largest trash incinerator in Connecticut, which is the fifth largest in the country is located in Hartford, Connecticut, which has a population that's 78 percent black and Latino.

The second largest in Connecticut, which is the 11th largest in the country, is in Bridgeport, Connecticut, which is, again, a majority of black and Latino.

We are very concerned about asthma in our communities, with cancer, diabetes, and endometriosis. In Hartford our asthma rate is 20 percent, and then there's another 10 percent of people who have symptoms which may or may not be asthma.

I want to comment on all of the -- on all of the rules. And we're very concerned about the trash -- we're very happy that EPA is tightening the rules on trash incinerators and on sewage sludge incinerators.

I forgot to mention that we also have the largest sewage sludge incinerator in the state in Hartford. And, in fact, we have 8 regional waste facilities -- our trash facility takes waste from 70 different surrounding suburban towns -- wealthy suburban towns -- to bring it to Hartford which is one of the poorest cities in the United States.

And so we're very concerned about the toxins from that, and we believe that it contributes to our high rates of asthma, cancer, diabetes, endometriosis, and other health effects.

We -- so we think that's it's really important to have tighter rules. What we're concerned about, though we think that the rules should be tighter, and particularly since some in trash and sewage sludge what's burned is -- changes from minute to minute. So we believe that there should be much stricter, continuous emissions monitoring.

Our trash incinerators are monitored once a year for dioxins and for metals and so on; but we believe that the newer technology allows much more -- allows for continuous emissions monitoring for not just particulates but also the metals themselves. We believe that mercury, and lead, and arsenic, and chromium should be at least some of the metals that are monitored continuously because they vary so much from time to time.

We're also concerned about the explosions and fires. We have at least 10 major explosions and fires per year -- an average of 10 major explosions and fires a year at our trash incinerator in Hartford. It used to be that we had over a hundred fire calls a year. Most of them were false alarms, but there used to be dozens of fires at our trash incinerator. And none of those -- and the emissions that are emitted during those fires do not count toward the limits for air toxins and air pollution; and we believe that they should. We believe that these facilities should be responsible for their mishaps, for their upsets, for their fires and explosions.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 59

Comment: As for incinerators, the ash needs to be addressed. We've spoken about this very briefly today, but I think we really need to remember that this doesn't go away. It's in the ground. It goes into mother earth and it becomes dust which creates pollution for our lungs. Like some of our colleagues that are here, which I concur with biologist Shpak, with the lady who spoke with Mr. Marquez earlier, and the gentleman from South Los Angeles that, you know, it just doesn't evaporate into the atmosphere. We would rather it to, obviously, but it doesn't have an osmosis, you know, type of processing.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 72

Comment: So thank you for finally proposing emission standards for incinerators.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Allan Muller

Commenter Affiliation: Green Delaware

Document Control Number: EPA-HQ-OAR-2006-0790-1104

Comment Excerpt Number: 1

Comment: Green Delaware's background in this involves controversies over various incinerator and "biomass" projects in Delaware, Florida, Minnesota, Massachusetts, North Carolina, and other locations.

Almost without exception, the promoters of these projects claim they are "clean" and "green" without regard to the actual high emission factors from these types of facility. For an example of a 20-25 MW proposed in Minneapolis, see the attachment, [See DCN:EPA-HQ-OAR-2006-0790-1104.1 for emissions data].

If these facilities proliferate without better control of air emissions, significant damage to public health and quality of life will result.

Many times, air regulators come under substantial political and other pressures to issue permits for these facilities without adequate inquiry and without adequately stringent emission limits. For

example, the "Fibrominn" poultry waste burner in Benson, Minnesota, was permitted although the applicant's own data modelled PM-10 levels several times the NAAQS. [See submittal for enclosed letter to Steve Gorg of the Minnesota Pollution Control Agency with his responses.]

These facilities are often promoted and /or supported by "renewable energy" advocates, utility regulatory bodies, "economic development" entities, and so on, under the mistaken impression that they are "clean."

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Rich Raiders

Commenter Affiliation: Arkema Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1958.1

Comment Excerpt Number: 1

Comment: EPA Should Fully Implement The Statutory Solid Waste Combustion Exemptions. In *NRDC v. EPA*, 489 F.3d 1250 (D.C. Cir 2007), the Court of Appeals for the District of Columbia Circuit ("D.C. Circuit") instructed EPA to fully comply with applicable Clean Air Act §§ 112 and 129 provisions in the Boiler and Process Heater ("Boiler") Maximum Achievable Control Technology ("MACT") at 40 CFR 63 Subpart DDDDD and CISWI New Source Performance Standards ("NSPS") at 40 CFR 60 Subparts CCCC (for new units) and DDDD (for existing units). The court instructed EPA to regulate all HAP from all Boiler MACT units, and to properly distinguish boilers from CISWI units based on design specifications and fuel usage capabilities. Because the court could not validate the floor determinations for either the Boiler MACT or CISWI, it vacated both sets of rule floors and remanded the underlying rules back to EPA for what became this proposal package.

EPA expended significant resources to address the court's floor concerns and added provisions to regulate all HAP in the Boiler MACT proposal. However, the Agency, in editing the existing CISWI regulations that were not vacated by the court, also improperly stripped at least one critical exemption from the prior CISWI regulations. In our comment from the DSW docket, we explained how § 129 restricts EPA from regulating metal recovery processes from solid waste regulations. § 129(g) restricts EPA from regulating "material recovery facilities (including primary or secondary smelters) which combust waste for the primary purpose of recovering metals." In the prior CISWI rules, §§ 63.2020(h) and 63.2555(h) included a subset of the statutory material recovery facility exemption ("Units that combust waste for the primary purpose of recovering metals, such as primary and secondary smelters."). EPA inappropriately proposes to delete these two required provisions. Instead should expand these provisions to address two specific issues.

In evaluating the material recovery exemption, we suggest that EPA is not limited by the parenthetical "primary and secondary smelters" Congress used to describe their intent. Many

types of units are used to recovery materials destined for reuse. Arkema operates a unit that uses alumina as a chemical catalyst. Rather than dispose of hundreds of tons per year of spent alumina in a Subtitle D solid waste landfill, Arkema regenerates the alumina in a roaster system, returns the regenerated catalyst to the production unit, and only disposes of material no longer meeting quality specifications. By deleting the existing source § 63.2555(h) exemption, EPA potentially improperly subjects this source to CISWI. Congress specifically instructed EPA not to regulate this type of equipment in any § 129 standard. Were EPA to want to regulate material recovery processes, it must designate such a process as a source category under its existing § 111 NSPS or § 112 MACT authority and promulgate appropriate source category standards. As no § 111 or § 112 standards exist for this process, owners and operators must assume that EPA has declined to regulate material recover units in its Clean Air Act authority. EPA has deferred regulating these sources to state or local air permitting authorities.

Not regulating materials recovery units is consistent with Congressional intent. In discussing an amendment offered by Senator Robert Dole to regulate municipal waste combustion units, Senator Quentin Burdick noted that regulating municipal waste combustion units in the proposed § 129 would reduce landfill demand, encourage responsible municipal waste incineration, and regulate hospital waste incineration. 136 Cong. Rec. S16895-01, October 27, 1990. Senator Max Baucus specifically noted in the § 129 debate: “that some incinerators should not be regulated at all by these requirements. As such, the [§ 129] amendment exempts secondary materials recovery facilities from these requirements because their specific purpose is to recover valuable material – like palladium from used catalysts. These operations are exempt to encourage greater reuse and recovery of materials rather than discarding them in landfills.”

136 Cong. Rec. S3748-01, April 3, 1990. EPA does not have the authority, either directly from § 129 or from Congressional intent, to remove existing § 60.2020(h) or § 63.2555(h). EPA should retain these provisions as statutorily necessary.

EPA has previously recognized that certain materials being recovered for reuse should not be regulated as a solid waste under the Resource Conservation and Recovery Act (“RCRA”). 40 CFR 261.4(a)(8) exempts from solid waste regulation secondary materials that are “reclaimed and returned to the original process” so long as controlled flame combustion of the material does not occur. 40 CFR 261.4(a)(13) exempts scrap metal being recycled from solid waste regulation. 40 CFR 261.4(a)(17) exempts certain spent materials from the primary minerals industries from solid waste regulation, so long as the material is treated as a valuable commodity and processing does not generate a listed hazardous waste. EPA appropriately distinguished valuable materials from solid wastes in these exemptions in a manner consistent with the Congressional mandate to distinguish material recovery units from CISWI regulation. EPA should harmonize CISWI regulation in consistently with its prior practice in § 261.4(a).

EPA Should Follow Its Statutory Mandate Exempting Material Recovery Processes From CISWI Regulation To Rescind Its Burnoff Oven Proposal. As established above, EPA does not possess the statutory authority to regulate material recovery processes. Regulating such processes also conflicts with existing EPA RCRA regulatory positions encouraging recycling and discouraging unnecessary solid waste landfill use. However, at proposed Table 8 of Subpart CCCC and Table 9 of Subpart DDDD, EPA improperly proposes limits regulating emissions from burnoff ovens under CISWI. EPA should rescind these proposals, along with related regulatory text throughout proposed Subparts CCCC and DDDD of Part 60.

EPA does not reconcile its proposed definition of “burnoff oven” at proposed §§ 60.2265 and 60.2875 (“any rack reclamation unit, part reclamation unit, or drum reclamation unit”) with the statutory material recovery prohibition. “Reclamation” and “recovery” are synonyms. If recovery cannot be regulated under § 129, neither can reclamation. On a statutory basis, EPA should withdraw proposed burnoff oven regulation.

In addition, § 261.4(a)(8) exempts from solid waste regulation secondary materials, with certain conditions. While most of the conditions in this exemption do not apply to metal parts being cleaned in a burnoff oven, condition (b), the controlled flame combustion, could be controlling. Burnoff ovens work on the theory of pyrolysis, a cleaning process in a low oxygen atmosphere where a controlled flame is not required or desired. These ovens are typically designed as indirect heat units, where the material on the part is oxidized without flame. Some Arkema units are electrically heated, with no flame present, even in the indirect heating section. Many units in plastics service are designed to recover, instead of an ash, molten and re-solidified plastic that is disposed of as a Subtitle D solid waste. Because these activities meet the § 261.4(a)(8) exemption, parts managed in burnoff ovens are excluded from RCRA solid waste regulation. Units processing materials excluded from solid waste regulation should not be regulated under a Clean Air Act authority designed to regulate solid waste management. Therefore, EPA contradicts existing regulations in the CISWI burnoff oven proposal and should not finalize burnoff oven portions of proposed Subparts CCCC and DDDD.

In this exemption, plus several heat-related solid waste management exemptions, EPA recognizes that the solid waste point of generation for materials contained on or with the recovered material is during the exempted process, not the point where the material is first identified as available for recovery or recycling. This principle is best illustrated in § 261.4(a)(17), where EPA requires primary mineral processors to evaluate if spent material is a listed hazardous waste. EPA took this position to resolve a point of generation question, where, absent the exemption, the point of generation of the waste would otherwise be removal of the part from the manufacturing equipment. Were the point of generation before the exempt reclamation process, many § 261.4(a) exemptions would not work in practice. In the burnoff oven question, the point of generation, applying existing EPA RCRA solid waste exemptions, is not the removal of the part from the manufacturing equipment, but the removal of residue from the burnoff oven.

At 75 Fed. Reg. 31958, EPA attempts to claim that alternate technologies exist to replace burnoff ovens that EPA correctly claims would be removed from service if this CISWI proposal becomes final. However, EPA does not attempt to justify this claim. Due to the nature of the parts that Arkema typically cleans in its five burnoff ovens, no alternate technology exists. EPA suggests that owners and operators may use abrasive or water blasting to clean materials from parts now processed through burnoff ovens. In four Arkema burnoff oven applications, the parts being cleaned are finely machined components of plastics extrusion systems, where the company invests heavily in heavy-duty precision machinery to manufacture products to strict quality standards. Any cleaning method that would subject this equipment to abrasion risks damaging the dimensional stability of the part, where the part may no longer properly fit into the equipment. Parts that no longer fit into plastics manufacturing and extrusion equipment become very expensive solid waste. Potential cryogenic solutions would also risk dimensional stability and are unsuitable for plastics parts cleaning. In the fifth situation, chemical residue is cleaned

from the parts after all other feasible technologies, including purging, mechanical cleaning, and chemical cleaning, have been completed.

Arkema also investigated methylene chloride based halogenated cleaning systems as an alternate technology. While some polymers Arkema manufactures would be amenable to halogenated solvent cleaning, the nylon based polymers manufactured at one Arkema facility would resist halogen cleaning. The other problem is worker exposure. EPA promulgated the halogenated solvent cleaning MACT standard at 40 CFR 63 Subpart T in 1994. Subpart T placed substantial restrictions on halogenated parts cleaning, driving many companies to replace parts cleaners with burnoff ovens. This proposal, which will by EPA's admission discourage burnoff ovens, returns industry to a world that EPA closed down 15 years ago. Manufacturers have since adapted, reducing employee exposure, eliminating a source of HAP emissions that in practice were not necessary, and improving cleaning performance by implementing burnoff ovens. With this proposal, often the only remaining option, especially in cases where manufactures must clean parts before a vendor will perform maintenance on the part, is to dispose of the part as a solid waste. As described above, Congress wrote § 129 to avoid sending unnecessary solid waste streams to landfills. The net result of EPA's attempted burnoff oven regulation is to circumvent Congressional intent in a manner that will compromise the plastics industry.

EPA Should Decline To Regulate Burnoff Ovens Under Its Existing Authorities. The regulatory burden associated with burnoff oven standards is unacceptable. The MACT floor process at CAA § 112(d)(3)(A) allows the Agency to set standards based on existing sources "(for which the agency has information)" (parentheses original). However, in the case of burnoff ovens operating in the plastics industry, the Agency is hard pressed to claim that the two sets of incomplete data, not characterizing the entire statutory CISWI pollutant list, forms a justified MACT floor determination. Congress requested that EPA base MACT floors on at least 30 sources, or not less than five if emissions data is not reasonably available from 30 sources. However, emissions data could become available from thousands of plastics industry burnoff ovens, if EPA had only asked in a timely manner. The fact that EPA only collected an extremely limited subset of potentially available burnoff oven data, and skipped some pollutants from the data requests it did make, shows that EPA had not considered burnoff ovens a viable source category throughout the entire rulemaking process.

Had EPA completed a full and reasoned analysis of the burnoff oven source category, it would have found that potential regulatory action unjustified. First, these sources, in the aggregate, do not represent a substantial source of any air emissions. The amount of materials to be cleaned charged from parts is insignificant compared with other CISWI source category facilities. Typical burnoff ovens only clean between five and 20 pounds of material from the charged parts per batch, and can only clean a few batches of parts per day. The CISWI units Congress believed it was regulated typically charge several tons of material per day, without the intended recovery of most of the mass charged into the unit. On this basis, the expected \$50,000 initial test cost of a unit that is not expected to emit more than a ton of total pollutant per year far exceeds any "above the floor" cost threshold EPA has identified in the MACT program.

Courts have noted the burdens of unnecessarily imposing regulatory burdens on facilities that cause "absurd results" (See, *Alabama Power v. Costle*, 636 F.2d 323 (D.C. Cir. 1980)). EPA

correctly notes that it has the authority, when absolutely necessary, to avoid absurd results when a Congressional mandate, created to apply to an earlier set of facts not reasonably anticipated during the Congressional debate, causes results that the Agency cannot justify and EPA cannot reasonably defend. The Chevron U.S.A. v. NRDC (467 US 837 (1984)) deference logic allows EPA, when Congress has not spoken clearly to a question, to use its reasoned judgment to resolve a problem. In Alabama Power, the D.C. Circuit allowed EPA to act on “administrative necessity” when an existing authority defies logic. Burnoff oven regulation is one situation where EPA should use its administrative necessity discretion to avoid the absurd result of imposing unduly burdensome regulations on burnoff ovens emitting extremely small amounts of regulated air pollutants.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Rich Raiders

Commenter Affiliation: Arkema Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1958.1

Comment Excerpt Number: 5

Comment: In another situation, the standard recovery in a Method 5 (40 CFR 60 Appendix A) particulate testing is approximately 1 milligram (mg). The CISWI particulate standard, translated into Method 5 terminology, limits capture to just over 1 milligram at typical stack concentrations. If the Method 5 filter did not capture significant amounts of particulate during the test protocol, test firms are required by Method 5 to assign a 0.050 mg default particulate capture value to the filter, a full 5% of the 1 mg design value for the method at the CISWI heat recovery existing source particulate limit. These emissions limits could be inappropriately influenced by small changes and default values inherent in the test method. EPA should not promulgate emissions standards where compliance may depend on the variability of the test method, but should restrict its standards setting to only where a competent test firm can clearly and consistently distinguish between compliance and noncompliance outside known test variability.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Robert H. Colby and G. Vinson Hellwig

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2022.1

Comment Excerpt Number: 6

Comment: First, while the section 112 limits are based on MACT floor analyses that recognize this principle, the proposed section 129 limits are not. The section 129 categories are based on the purpose of the unit and traditional waste management categories (incineration, energy recovery, waste-burning kilns, etc.). While these subcategories are consistent with the language of section 129, they make no distinction between coal-fired, biomass-fired, liquid-fired and gas-fired energy recovery units. Industrial boilers combusting waste coal should not be expected to meet mercury limits achieved by biomass or oil-burning units; units combusting wet (low BTU) waste wood would have a difficult time meeting CO levels expected of coal-fired units. While we are loath to suggest even more subcategories than EPA has proposed,⁹ NACAA believes the “energy recovery unit”¹⁰ section 129 subcategory should be further divided by fuel type. In order to avoid a situation where the use of subcategories with only a few units gives rise to MACT floors that are unreasonably lax because of the calculation of small sample variability, NACAA suggests that EPA use its authority to establish “beyond the floor” limits to conform emission limits for section 129 energy recovery units and section 112 boilers burning similar fuels.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Rich Raiders

Commenter Affiliation: Arkema Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1958.1

Comment Excerpt Number: 7

Comment: EPA Should Not Require CISWI Compliance During Startup, Shutdown, and Malfunction Events. For the last two decades, EPA required MACT facilities to develop and follow startup, shutdown, and malfunction (“SSM”) plans to address HAP emissions during times when steady-state operations were not possible. In 2008, the D.C. Circuit vacated this 40 CFR 63.6(f)(1) authority in *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008) (“SSM Vacature”). This opinion required EPA to reassess the SSM system for all 40 CFR 63 MACT standards. Please see the ACC comments on this issue for more details concerning SSM and the Boiler MACT and GACT MACT standards.

However, the SSM Vacature did not invalidate SSM provisions for CISWI or any other Part 60 NSPS standard. CISWI, per § 129(a), is promulgated following standards used for NSPS standards, not under the MACT system. Nothing in the SSM Vacature opinion addressed Part 60 standards. EPA does not explain in the proposal how it infers that the SSM Vacature applies to CISWI. In fact, prior case law (*Essex Chemical Corporation v. Ruckelshaus*, 486 F.2d 427 (D.C. Cir. 1973)) requires EPA to consider SSM when setting Part 60 standards, which EPA failed to do for CISWI. EPA did not collect SSM emissions data, did not consider how its floor applied or did not apply during SSM events, and did not set separate SSM emissions standards for CISWI.

In addition, EPA incorrectly changed §§ 60.2070(c)(1)(vii) and 60.2635(c)(1)(viii), among other citations, replacing the word “correct” with the word “prevent.” These changes are part of EPA’s ill-advised reconstruction of SSM. Here EPA removes the historical process optimization nature of SSM compliance and replaces it with a system that no longer recognizes that malfunctions happen. Historically, owners and operators used the SSM process to recognize, solve, and prevent future occurrences of problems that otherwise wouldn’t arise in process units. However, EPA inappropriately assumes here that SSM authority only prevents problems. This refocusing discourages operators from finding and solving problems that emerge, and only encourages operators to focus on problems that don’t yet exist. EPA should not adopt these proposed changes in CISWI, or any other §§ 111, 112, or 129 standards, but should encourage, even in light of the MACT SSM Vacature, prevention and resolution of SSM issues within the SSM structure. EPA should reevaluate the CISWI standards, including SSM considerations.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Susan Eckerly

Commenter Affiliation: National Federation of Independent Business, NFIB

Document Control Number: EPA-HQ-OAR-2006-0790-1631.1

Comment Excerpt Number: 7

Comment: EPA has also issued an NPRM affecting commercial and industrial solid waste incineration (CISWI) units. Similar to the area source boiler rule, this proposal will broaden the regulated community, impose excessively stringent emissions requirements, and increase the paperwork burden on small business owners.

NFIB’s five primary concerns with this rule are:

Reduction of the types of exempt incineration units: EPA has reduced the types of incineration units exempt from CISWI rules from 15 to nine. This reduction increases the number of small businesses that will be affected. In addition, some of the industries that can least afford expensive new regulation — such as the small farming industry — may now be covered.

Inclusion of units that recover energy from the combustion of solid wastes: This proposal would create a subcategory of CISWI units that recover energy from the materials they burn. Previously, such units were exempt from CISWI requirements because they essentially turned waste into a useable source of energy. This new inclusion reduces the incentive for a facility to use an incinerator that recovers energy since it is now subject to complex and burdensome regulatory requirements.

Requirement to be in compliance with emission limits even during startup, shutdown, and malfunctions: The proposal requires units to keep emissions below limits even during the brief, emission-heavy periods of startup and shutdown, and during unforeseen malfunctions. This

proposal may unnecessarily bring more units over the emissions limits and thereby subject more facilities to potential violations and additional reporting and recordkeeping requirements.

This proposal could add substantial cost to the regulated community at little, if any, gain to the public.

Standards for new units are far too stringent: EPA's proposal includes standards on new units that are so difficult to meet the agency itself does not anticipate any new units being constructed for three years because it will be too expensive to add controls that will allow the new units to comply with the proposed emission limits. This proposal would seem to run counterintuitive to reducing emissions. Newer units run cleaner and more efficiently than older ones. Yet, instead of providing incentives for facilities to purchase cleaner burning units, EPA has gone out of its way to ensure that no new units will be constructed, let alone used, in the foreseeable future.

EPA has based limits on incinerator subcategories on a proposed definition of solid waste that may change: EPA set its proposed emission limits for the new subcategories using the maximum achievable control technology (MACT) procedures for new and existing sources. In order to do this, the agency used the proposed definition of solid waste. This definition of course, could change depending on the comments and feedback EPA receives. The result is that the proposed emission limits could be rendered useless, and could wind up even more stringent than this proposal. EPA should have finalized its definition first so that the regulated community could have a full understanding of the burdens of the CISWI rule.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Robert H. Colby and G. Vinson Hellwig

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2022.1

Comment Excerpt Number: 9

Comment: EPA should also consider its proposed MACT rules in light of BACT determinations for similarly situated units and explain why emission limitations deemed "available" as BACT are orders of magnitude more stringent than the ("maximum achievable") MACT standards. A comparison of the proposed standards for new units with those proposed for existing units highlights the issue. The following table sets out the differences for waste burning kilns [See submittal for table.] [Footnote: These differences suggest that the MACT floor for existing units was largely based on emissions from uncontrolled units. They may also be the result of large "variability" calculations. For incinerators and for Energy Recovery Units (except for CO) the differences are much smaller, suggesting that the "best performing units" may have some level of controls. There may also be an error, as the SO₂ limit proposed for new Energy Recovery Units is the same as that proposed for existing units.]

A review of EPA's RACT/BACT/LAER clearinghouse reveals a number of BACT decisions for cement kilns that are far more stringent than EPA's proposed limits. [Footnote: Many of these decisions are for new units, but are based on technologies suitable for retrofit (albeit at somewhat greater cost).] In addition, EPA's control technologies guidelines for cement kilns, [Footnote: See, http://www.epa.gov/ttn/catc/dir1/cement_updt_1107.pdf See also additional studies by Northeast States for Coordinated Air Use Management (NESCAUM) <http://www.nescaum.org/documents/ici-boilers-20081118-final.pdf>; http://www.nescaum.org/documents/hg-controland-measurement-techs-at-us-pps_201007.pdf.] published under section 108 of the CAA, document the existence of cost-effective retrofit technologies available for control of SO₂ and NO_x in cement kilns. EPA seems to assume either that there are no cost-effective controls for these pollutants at cement kilns or that the CAA does not require MACT limits to be based on these controls. EPA should explain its rationale in greater detail and set forth a basis for any final decision it makes. There are other proposed floor limits that greatly exceed what would be expected from the application of maximum achievable technology. For example, under the alternate definition of solid waste, EPA's proposed MACT limit for CO emissions from biomass-fired fluidized bed boilers is 10,650 ppm. EPA should review each of its proposed MACT limits to ensure that they reflect the application of maximum achievable technology, not merely the MACT floor. In addition, it would seem that MACT should be more stringent than either GACT or BACT. Accordingly, MACT limits for cement kilns for SO₂ and NO_x should be at least as stringent as BACT limits for such units.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Rich Raiders

Commenter Affiliation: Arkema Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1958.1

Comment Excerpt Number: 10

Comment: EPA proposed to require Method 22 (40 CFR 60 Appendix A) monitoring of CISWI ash removal activities. However, some CISWI units may not generate enough ash to remove from the combustion chamber. EPA should allow CISWI owners and operators to certify, on an annual basis as part of the required periodic reporting process, that no ash management activities occurred during a reporting year in lieu of any Method 22 monitoring of nonexistent ash removal activities.

EPA should clarify that particulate standards in the proposed regulations only apply to the "front half" of Method 5 test trains. Some permitting authorities, including the Texas Commission of Environmental Quality ("TCEQ"), require facilities to report Method 5 particulate matter test results as the sum of "front half," the sampling probe, heated filter, and intermediate transfer line, and "back half," or impinger set, particulate recovery. As EPA has proposed "front half" only particulate standards for these regulations, Arkema requests that EPA clarify that a

permitting authority may not, following its own test protocol policies, require facilities to use both “front half” and “back half” results to demonstrate compliance with particulate standards. This request also applies to compliance demonstrations, such as metals and D/F, that rely on Method 5 protocols as part of the compliance demonstration.

Above we describe why EPA should not regulate burnoff ovens under § 129. Burnoff ovens present the additional complication that operating cycles do not allow valid D/F testing using Method 23 (40 CFR 60 Appendix A). Method 23 requires run times of not less than three hours per run, repeated over three runs. EPA and state/local testing policies, regulations, and procedures require owners and operators to conduct testing using consistent process loadings processed at the same rate over three test runs. Burnoff ovens operate in batch, where a load of parts is charged into the oven, cleaned, and removed. Over the typical four-hour cycle, the event where the material is removed lasts less than one hour, where most of the rest of the cycle consists of heat-up and cool-down. An owner and operator cannot collect three hours of D/F sample in a one hour event. Because every burnoff oven batch is by definition different, and operators cannot assure constant (within 10%) loading rates from batch to batch, no operator can guarantee run to run consistency over three burnoff oven cycles. The ovens Arkema uses are not designed to allow users to extend the cycle time charge additional parts during the cleaning cycle. Extending the cycle time would not increase the length of time where the cleaning event occurs, but risks damaging the parts being cleaned and/or the oven due to excess thermal load. Therefore, demonstrating compliance with burnoff oven emissions limits, especially D/F limits, is problematic if not impossible. EPA should not promulgate emissions standards where the regulated community cannot reasonably demonstrate compliance using EPA test methods.

EPA Should Not Force Burnoff Oven Operators Into the Title V Program.

Clean Air Act § 129(e) requires owners and operators of CISWI regulated units to obtain or retain Title V operating permits. Most traditional CISWI units already operate under Title V permits, and CISWI incinerators and energy recovery units operating without Title V permits should likely obtain coverage. However, asking operators of burnoff ovens to enter the Title V program constitutes an undue burden on these often very small facilities.

EPA mischaracterized the universe of burnoff oven operators in the proposal and docket. Almost every plastics manufacturing, extrusion, and forming facility in the United States operates at least one burnoff oven. The vast majority of these facilities exclusively involve forming, extruding, or molding plastic parts. Potential emissions from plastics parts manufacturers are, by the nature of their operations, far below Title V permitting thresholds. Many more of these facilities exclusively involve polymerization of plastic fibers, resins and/or emulsions. While some of these facilities operate with Title V permits today, many do not. Of the four Arkema plastics manufacturing facilities operating burnoff ovens today, only one operates under a Title V permit. One of the remaining three operates under a federally enforceable synthetic operating permit (“FESOP”), and the other two operate under state-only operating permits.

EPA has traditionally noted the burdens of unnecessarily imposing Title V permitting requirements on smaller sources. Requiring natural minor facilities to develop and submit Title V permits for a standard that EPA should not have imposed on those minor facilities imposes an undue cost and permitting burden on those facilities. EPA should evaluate and calculate the

permitting cost burden that it would impose on burnoff oven facilities, and demonstrate if such a burden is appropriate to justify regulation on these units. The substantial Title V burden on facilities ill equipped to handle the responsibilities of major source permitting represents another absurd result where EPA should use it's Alabama Power authority to avoid absurd results.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Robert H. Colby and G. Vinson Hellwig
Commenter Affiliation: National Association of Clean Air Agencies (NACAA)
Document Control Number: EPA-HQ-OAR-2006-0790-2022.1
Comment Excerpt Number: 26

Comment: Other examples of an upward bias can be found in EPA's calculation process. EPA has advised that ICI Boilers that combust solid waste would largely fall within the "Energy Recovery Unit" subcategory of the proposed CISWI rule. When burning similar materials, such units would show similar differences in emissions as ICI Boilers, irrespective of whether the material being combusted was "discarded." For this reason, those units should be subcategorized into coal-fired, wood-fired, oil-fired (if any) and gas-fired (if any). EPA should then use its "beyond the floor" authority to ensure that the resulting MACT standards are reasonable.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Robert H. Colby and G. Vinson Hellwig
Commenter Affiliation: National Association of Clean Air Agencies (NACAA)
Document Control Number: EPA-HQ-OAR-2006-0790-2022.1
Comment Excerpt Number: 27

Comment: EPA has asked for comment as to whether it may (or must) consider new emissions data and calculate a new MACT floor when conducting the mandatory five-year review of MACT standards. We suggest that EPA not adopt a position that attempts to govern its review of all future MACT standards at this time. NACAA believes the better approach would be to evaluate this issue on a case-by-case basis and make a reasoned decision based on the record before it. Where the initial MACT floor is based on a robust data set, it is likely that a number of units will be top performers and reconsideration will not change the MACT floor significantly. Given the large compliance margins adopted in promulgated standards, it is unlikely that the top performers will significantly improve their performance in the next five years.

However, where the floor was based on limited testing data, testing uncertainty, rather than technical limitations, may have been the dominant factor in setting the floor. In these circumstances it may be appropriate to use (in some fashion) subsequent testing when conducting a five-year review. A review of the calculated uncertainty assigned to the best performers may be particularly relevant since, as explained above, the post-compliance period provides the first real opportunity to gauge the variability in emissions where the source is making some attempt at controlling those emissions and the data concerning this issue has been limited for almost all standards promulgated to date.

With respect to the section 129 standard under consideration, it is quite clear that the earlier data were extremely limited and information concerning variability of performance of complying units remains limited. Accordingly, NACAA recommends that in the course of its current rulemaking EPA recalculate the MACT floors for the subject section 129 units using relevant new data as appropriate, and consider this issue on a case-by-case basis as it reviews other standards.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Ronald W. Gore

Commenter Affiliation: Alabama Department of Environmental Management

Document Control Number: EPA-HQ-OAR-2006-0790-1494.1

Comment Excerpt Number: 2

Comment: Backdoor' banning of industry types.

In the preamble to the proposed CISWI rule, EPA stated that it anticipates that no new CISWI units will ever be constructed, due to the cost of meeting the proposed requirements. Section 112(d) of the Clean Air Act Amendments of 1990 explicitly states that the Administrator is to consider the cost of the achievability of new emissions standards. The Department does not understand how the Administrator has considered costs in this case, when it expressly states that the standards for new sources are too expensive to achieve.

It is this Department's belief that the utilization of the TrankenMACT' approach to establish limitations for new sources will also, in effect, prohibit construction of new solid fuel-fired boilers.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Martha E. Rudolph

Commenter Affiliation: Colorado Department of Public Health and Environment
Document Control Number: EPA-HQ-OAR-2006-0790-1979.1
Comment Excerpt Number: 1

Comment: The State is concerned about the cost of this proposal. The number of sources affected by the proposed CISWI Rule has been underestimated and, consequently, the associated economic and workload impacts have been underestimated. A review of sources within Colorado identified approximately 30 incinerators, burn off ovens, and furnaces alone that may meet the proposed CISWI requirements. This equates to —17% of EPA’s nation-wide total of 176 units’. In addition, it appears that units that burn oil-contaminated soils would also trigger requirements under CISWI as Energy Recovery Units, adding to the total number of CISWI Units in Colorado. Further, given the sustainability movement’s efforts to rethink materials’ use, including those materials previously considered as "waste" (i.e. landfill gas, wood waste, agricultural crop waste, etc.), EPA’s assumption that there will be no new CISWI units may be incorrect. Consequently, the regulatory impact analysis may be incorrect.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: C.A. Vandersteen
Commenter Affiliation: Louisiana Forestry Association
Document Control Number: EPA-HQ-OAR-2006-0790-2246
Comment Excerpt Number: 2

Comment: Second, in the CISWI MACT rule EPA groups units burning different waste materials, making it difficult, if not impossible, for many units to meet derived standards, even with expensive state-of-the-art emissions reduction equipment. EPA should take advantage of its ability to subcategorize units enabled under Section 129 and provide facilities with the opportunity to meet the standards at reasonable costs.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Martha E. Rudolph
Commenter Affiliation: Colorado Department of Public Health and Environment
Document Control Number: EPA-HQ-OAR-2006-0790-1979.1
Comment Excerpt Number: 3

Comment: The proposals’ promotion of materials diversion to landfills to avoid triggering the proposed CISWI requirements is problematic on several levels. First, EPA estimates that

214,000 tons of material would be diverted to landfills annually,³ an estimation the State questions. Even if the estimation were accurate, there is no assessment of whether or not landfills have the capacity to handle the volume of these additional materials. Second, EPA admits that it did not account for any secondary impacts associated with alternate disposal of diverted energy recovery.⁴ EPA should consider the greenhouse gas generated by landfilling this material as well as the gas generated by producing and then burning the materials that replace the landfilled materials.

Colorado is concerned about the significant potential for mismanaged and illegal disposal of wastes, especially considering the "other ingredients" category of materials resulting from facilities that choose not to upgrade to meet the more stringent CISWI requirements, but simply eliminate those fuels or ingredients, leaving the waste generators searching for disposal options.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Martha E. Rudolph

Commenter Affiliation: Colorado Department of Public Health and Environment

Document Control Number: EPA-HQ-OAR-2006-0790-1979.1

Comment Excerpt Number: 9

Comment: EPA states that the CIS WI rule may be interpreted to provide the Administrator with flexibility in determining the meaning of solid waste under that section'. EPA is requesting comment on an option where, to determine applicability of CISWI, the Agency would rely on a determination through a state's beneficial use program that certain secondary materials are or are not solid waste. EPA states that such state programs are meant to encourage the use of non-hazardous secondary materials, provided that the uses maintain the specified state's acceptable level of risk, protect human health and the environment, and are managed in accordance with the conditions of the determination. The EPA should use the flexibility provided by the CAA Section 129 to rely on a determination through a state's beneficial use program that certain secondary materials are or are not solid waste when handled in a manner approved by the state.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Alicia Oman

Commenter Affiliation: National Association of Manufacturers

Document Control Number: EPA-HQ-OAR-2006-0790-2234.1

Comment Excerpt Number: 63

Comment: EPA should exempt burn-off ovens.

Manufacturers are concerned about application of the proposed incinerator MACT standards to small “burn-off ovens,” particularly burn-off ovens that are used to clean paint and plastics from metal parts and dies. Proposed 60.2875

It is not appropriate to categorize burn-off ovens as incinerators, as most burn-off ovens are not actually combusting material. Instead they use lower temperature processes such as melting or pyrolysis and are specifically designed to avoid flaming conditions, which would damage the parts being cleaned. Alternatively, the exclusion for a materials recovery facility also should cover burn-off ovens. See CAA §129(g)(1)) (“materials recovery facilities (including primary and secondary smelters) which combust waste for the primary purpose of recovering metals”). EPA’s own description of burn-off ovens as units “used to clean residual materials off of various metal parts, which are then reused” recognizes that the primary purpose of these units is the recovery of metals. 75 Fed. Reg. 31,951.

Burn-off ovens are typically equipped with afterburners designed to oxidize fully the organics in oven exhaust. Small burn-off ovens are generally not equipped with air pollution controls to address HCl or dioxin/furan formation or metals.

The proposed emission limitations for burn-off ovens include dioxin/furans, HCl, cadmium, and mercury. (Table 9 to Subpart DDDD of Part 60) Testing alone for these pollutants would be very costly, and retrofitting small-burn off ovens with pollution controls would be prohibitively expensive.

The final rule should provide an exemption for all burn-off ovens, or at least those that process “clean” non-chlorinated plastics such as un-painted polyethylene. In the alternative, the final rule should apply more reasonable work practice standards for small burn-off ovens.

For example, a work practice standard specifying clean feed materials and annual burner tune-ups would be more reasonable and appropriate. Some states require air permits that contain standard permit conditions for burn-off ovens mandating the operation of an afterburner at more than 1,400 degrees Fahrenheit. The state permits require that records of afterburner operating temperatures be maintained whenever the units are in operation.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Commenter Name: Robert E. Cleaves

Commenter Affiliation: Biomass Powe Association

Document Control Number: EPA-HQ-OAR-2006-0790-1992.1

Comment Excerpt Number: 4

Comment: In the CISWI MACT rule EPA's selected categories groups units burning different waste materials, making it difficult if not impossible for many units to meet derived standards, even with expensive state-of-the-art emissions reduction equipment. EPA should take advantage of its ability to subcategorize units enabled under Section 129 and provide facilities with the opportunity to meet the standards at reasonable costs.

Response: This comment pertains to the CISWI rulemaking, and it is out of scope for this boiler rulemaking. Provided the commenter has submitted this comment to the CISWI rulemaking docket, the response to this comment will be provided there.

Out of Scope: Area Source Boilers

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 1

Comment: Let me focus on Boiler MACT and then end with a few comments on the other rules.

We believe EPA has significant discretion in the MACT program to protect public health while avoiding the unnecessary burdens these proposed regulations could impose. Boiler MACT could cost the forest products industry alone over \$6 billion in capital expenditures and hundreds of millions more in annual costs unless significant changes are made.

We are coming out of the worst economic recession since the Great Depression, and the forest products industry has lost over 350,000 jobs in the last three years. To be a sustainable industry supporting high-paying jobs and providing sustainable products, we need sustainable environmental regulations.

Otherwise, costs of this scale will force further mill closures and tens and even hundreds of thousands of additional job losses, especially given other expected, significant environmental regulatory costs.

Exports will drop, and imports will increase since no other country is contemplating requirements this extreme.

We have identified four broad areas for improvement in the Boiler MACT.

First, EPA should utilize its authority in Section 112(d)(4) of the Clean Air Act to set health-based emission limits to protect the environment and public health. This would avoid unnecessary controls where emissions of threshold pollutants, like acid gases, are low enough to be safe.

We are encouraged that EPA has invited comment on this approach and believe it should be adopted in the final rule for use on a facility-by-facility basis without complicated and unnecessary procedures that would restrict its use. It is the best way to target investments only to where problems exist as Congress intended. We can ill afford not to include such a health-based emission limitations given the economic implications of the rule.

Second, EPA should set more reasonable limits that would reflect the variability of real world, best performing boilers. Boilers go through warm-ups, shutdowns, load swings, fuel mix, and fuel quality changes, control efficiency differences, and performance testing adjustments.

For example, EPA should collect long-term carbon monoxide data from exhibiting CO monitors which show large variations, rather than conclude — based on short-term data — that CO performance is steady.

Finally, some boilers are used for limited periods of time for back-up and should be treated differently than boilers running day in and day out.

Third, EPA should base the limits on more realistic data. The data used in setting emission limits is heavily biased given the way it was collected and sorted. EPA required the best performing units to test and then took the best of that small data set to the point where they represent the best of the best performers — the top one percent, not the top 12 percent as the law instructs.

Only a handful of existing units can meet all the limits when you'd expect 12 percent of boilers to achieve the limits. And for new units, it's unclear whether state-of-the-art boilers could be guaranteed to perform at the necessary levels.

In addition, we need to apply different statistical approaches that align the data sets and their use in the rule making. Ultimately, EPA needs to look at other available data to paint a more realistic picture of boiler performance for each HAP and subcategory and make sure real world best performing boilers can meet the SET of HAP limits

Finally, EPA should not penalize clean fuels like biomass. Several of the existing and new source limits for biomass are extremely low because the baseline of emissions is very low compared to other fuels. Emissions of mercury, dioxin, and hydrochloric acid are present in very small amounts in wood and are inconsequential sources of these HAPs, yet the costs become exponentially more expensive and can't be consistently achieved.

The biomass limits are unduly influenced by test that could not detect the HAP, which suggests that the emission limits should be dropped or at least replaced by alternative work practices as was done for natural gas fired boilers.

Finally, over 60 boilers burned biomass with as little as 10 percent coal, but the proposal classifies them as coal boilers, setting unachievable CO limits. The CO limits of these combination boilers should be the same as the ones for biomass fired boilers. If we want to continue to encourage and expand the use of renewable carbon neutral biomass, the rule needs to change dramatically.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0397
Comment Excerpt Number: 2

Comment: We applaud the significant cuts to mercury and other hazardous air pollutants that will result if you implement the Major Source Boilers Rule, and we strongly encourage you to do so without succumbing to industry pressure for weakened or delayed standards. The health benefits outweigh the costs to industry by a tremendous margin, and those benefits are derived only from anticipated reductions in fine particulate matter. Reductions of mercury, lead, chromium, and other metals, and dioxins will have a significant impact on public health, and we ask Lisa Jackson and the EPA to act on these reductions without delay.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Norman Bujold
Commenter Affiliation: Cleaver Brooks
Document Control Number: EPA-HQ-OAR-2006-0790-0392.1
Comment Excerpt Number: 3

Comment: PM MONITORING FOR < 250MMBTU/HR, MAJOR SOURCE
Opacity <10% residual oil (#4#5#6) for <250MMBTUH w/o wet scrubber (from Major source proposed rule). This opacity number reflects a much higher PM emission value than what is stated in table 1 and 2.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0397
Comment Excerpt Number: 4

Comment: The PTPC mill has upgraded its operations and is in compliance with MACT I and MACT II, along with other federal and state compliance requirements. It's also considered a small pulp and paper company as defined by the Small Business Administration. The mill has two boilers that are subject to these rules -- a 1976 Stoker-Fired Biomass Boiler and a 1996 Oil-Fired Package Boiler that's used as a backup or auxiliary boiler.

Here are our concerns: PTPC volunteered to be on the SBA committee to review the impact Boiler MACT would have on small businesses. We are dismayed that the recommendations from that work have been, chiefly, ignored.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Norman Bujold
Commenter Affiliation: Cleaver Brooks
Document Control Number: EPA-HQ-OAR-2006-0790-0392.1
Comment Excerpt Number: 5

Comment: CO EMISSION, GAS 2
(Industrial watertube (IWT) boiler and firetube(FT) boiler, the best burner CO emissions that we can guarantee from 25% to 100% firing rate using medium to light weight average fuel gas mix density ($2 < MW < 36$):
30 ppmv for application of less than 180MMBTU/hr
60 ppmv for application above 200 MMBTU/hr

PM EMISSIONS GAS 2
For clean fuel gas of light to medium weight the best burner PM emissions are 0.003 to 0.005 lb/MMBTU
For propane gas PM emissions would range from 0.005 to 0.01 lb/MMBTU
Dirty gaseous fuels (containing solids or liquids in suspension) would have proportionally higher PM emissions.
Note: Always consider that the guarantees are given for a turndown range thus will not reflect the best possible numbers that can be obtained at a given constant firing rate.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 6

Comment: PTPC also provided section 114 data to EPA. And after much time, care and expense, we find it unfortunate that EPA chose to ignore or waste this data because it did not fit the norm for what EPA considered relevant.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 8

Comment: We are working hard to — now that you've released the best performing units to try to get additional information from them; but we also ask that the Agency go out and collect information from other sources, not just stack tests but maybe emission factor information to try to better represent the information that's out there.

So part of that we will take some responsibility, but I think the Agency also needs to do more work in gathering information that's out there and has not been gathered, particularly the CO data.

MR. WAYLAND: Okay. Thank you.

MR. GRIFFIN: I would concur with Tim's remarks and emphasize that ACC is also working very hard to provide the Agency with appropriate data that will further inform the statistics that are needed to set realistic standards.

MR. WAYLAND: Thank you very much.

MR. HUNT: I'll just add that one frustration is that a number of our mills spent a fair amount of money testing under Phase 2 as boilers, and because of this issue around what is a waste and a fuel, that data is not being used. So there is some very good data out there from facilities that were identified as top performers at the time of the ICRN testing whose data is not being used.

So we think the Agency can look outside the best performers to others that look very much like the best performers and have all the characteristics of the best performers and use that data given the relative paucity of the data set.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 9

Comment: I'm Bill Perdue, Vice-President Government and Regulatory Affairs for the American Home Furnishings Alliance.

The AHFA is the world's largest and most influential trade organization serving the home furnishings industry.

Member companies operate several domestic wood furniture manufacturing facilities and comprise an extensive global supply chain that provides a wide variety of home furnishings to the U.S. consumer. Member companies provide approximately 360,000 manufacturing jobs throughout the U.S. and represent a \$35 billion segment of the nation's economy.

The AHFA is deeply troubled by the potential effects of the domestic furniture manufacturing industry and the proposed emission standards for major source industrial, commercial, and institutional boilers and process heaters — the Boiler Rule — and the identification of non-hazardous materials that are solid waste — the Waste Rule.

As proposed, these two rules threaten to eliminate the longstanding environmentally beneficial practice whereby furniture companies generate heat and process steam at their plants by combusting wood fuel generated from the furniture manufacturing process.

The proposed rules are of great concern to those of us who represent furniture manufacturers and the employees of those companies. Unless altered, the rules could actually have the perverse environmental affect of forcing the transition of furniture manufacturing facilities from the use of wood as a fuel to the combustion of fossil fuels while simultaneously forcing the disposal in the landfills of a clean, high BTU renewable fuel in the form of wood generated from the furniture manufacturing process.

At one facility located in North Carolina we currently estimate that in order to do fuel switching away from the combustion of wood fuel, we estimate an annual cost of \$200,000 to dispose of this wood biomass. We also estimate that for that one facility an additional 12,000 tons of wood biomass fuel would be diverted to the landfill.

We also estimate that in order to do fuel switching and move away from wood biomass and switch to natural gas at that one facility with a small Fire 2 boiler would cost \$1.1 million to fuel switch and continue its operation today.

One of our major concerns with the proposal is the affect of the rules on wood-fired boilers commonly used in the furniture industry.

Under current practices boilers in the furniture industry are typically small and combust a kiln-dried wood fuel which is generated during the furniture manufacturing process.

The wood fuel is very dry, burns cleanly, has a neutral CO₂ emissions scoring and has a high BTU value. However, as we understand it, the Boiler Rule EPA has proposed would combine these smaller dry-wood fuel boilers used in the furniture industry into a broader biomass subcategory that includes boilers fired by wet fuel used in other industry sectors thereby creating a single subcategory of emission sources for evaluation.

By establishing a single large group of boilers that use both dry wood fuel and wet wood fuel, EPA effectively ignores the benefits and unique characteristics of dry wood boilers by imposing a single set of emissions standards on the entire category.

Large boilers burning wet biomass fuels have historically required costly controls as a result of their inherently higher emissions. The cost for small dry fuel boilers to meet standards that have historically applied to wet biomass boilers is prohibitive.

Currently, for that same boiler in North Carolina we estimate a cost of about \$1.5 million to retrofit that boiler with a scrubber add-on control end of pipe to continue operation of that boiler in North Carolina. And the incremental air quality benefit that would come from lumping dry fuel boilers into such a category is negligible. In fact, rather than make costly investments in new controls -- control facilities, a more likely outcome is that furniture manufacturers will retire their wood-fire boilers, replace them with natural gas or fuel oil combustion boilers and simply dispose of the dry wood fuel generated by the furniture manufacturing processes in landfills.

As greenhouse gas neutral fuels would be replaced by a fuel that emits substantial amounts of greenhouse gases, we estimate that at this same typical facility in North Carolina an increase in CO₂ to switch to natural gas of 10,500 tons annually.

This predictable outcome would not be consistent with the intent of the rule. To prevent this likely outcome from occurring, we request that EPA revisit the proposal and establish a distinct low moisture biomass subcategory for dry wood fuel.

Having this subcategory which considers the unique characteristics of these boilers and the heat content of dry wood fuel would enable a far more desirable economic environmental outcome.

We're also concerned with the exclusion of the health-based compliance alternative of the HCPA from the proposed rule. Section 112(d)(4) of the Clean Air Act establishes a mechanism for EPA to exclude facilities from certain pollution control regulations and circumstances when these facilities can demonstrate that emissions do not pose a health risk.

Using the discretionary authority under Section 112(d)(4), EPA may allow a facility to demonstrate the potential proposed risk of emissions for certain pollutants such as manganese and hydrogen chloride from the facility. If a facility can show that its emissions are below the

established thresholds for levels posing a risk of human health, EPA can use these data to exclude from requirement sources from which emissions do not pose a risk.

Using HBCA at the outset would allow facilities to comply based on health-based data rather than taking the interim step of installing emission control technology.

We believe the use of the HBCA as a logical tool and that when a facility can meet a more stringent health-based standard without the necessity of expensive emission control equipment, the HBC should be allowed.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 11

Comment: Question from Panelist] You asked us to consider a -- I think I've got this small dry fuel boiler subcategory to distinguish it from the larger biomass category.

In your opinion do we have the data currently to make such a distinction, or would that be something you might be submitting additional data on?

MR. PERDUE: No, we will submit additional data, but we do believe, Mr. Wayland, that you do have within your AP-42 factor a very distinct emission factor for dry fuel that the AHFA at the time the AFMA participated with EPA in developing. So, that data set should be there.

And like I said, there is a very distinct already subcategory for dry wood fuel.

MR. TOPSALE: You mentioned wood. Is that clean wood, or is some of the wood coated with some substrate, a lacquer, or some other chemical?

MR. PERDUE: The wood that we typically combust in our boilers is clean, dry kiln wood fuel with a moisture content of less than 8 percent with an 8,500 BTU fuel rating.

Now, in the course of the manufacturing process there may be a very small amount of wood in finished parts that may find themselves into a silo; but it is less than one percent of what we combust in our boilers.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 11

Comment: Flambeau River Papers is a pulp and paper mill that has been in operation in Park Falls since 1895. This mill has numerous boilers, the largest of which is the coal and biomass coal-fired boiler, number 6. Number produces approximately 60 percent of the energy needs for the pulp and paper mill on a daily basis. In the four years we have owned and operated the mill, we have been able to increase the efficiency of the boiler while at the same time decreasing our usage of coal from an historic average of 60 tons a day to being virtually free of coal today.

The mill's previous owner's reliance on fossil fuels is truly what drove the mill into bankruptcy back in 2006. Sky rocketing fossil fuel costs, including coal and natural gas, increased the energy costs from a budget of approximately \$400,000 a month to over 1.4 million a month. It was with this in mind that we made the commitment to ourselves, and the 313 employees at the mill, that we would become the first pulp and paper mill in North America to be fossil-fuel free. Because of that commitment, Flambeau River Papers has been able to reduce its carbon footprint by approximately 92,000 tons a year since 2005. This is another reason why we invested over \$3 million to develop a new industrial biomass fuel boiler that burns at approximately 10,000 Btu's per pound to replace the coal that was used in the number boiler in Park Falls. And it's the reason we are continuing to partner with the Department of Energy on a second generation biofuels project that we built next to the pulp and paper mill, and it will produce million gallons of second generation transportation fuels, electricity, and have enough steam left over to replace 100 percent of the natural gas needs at the pulp and paper mill. With Flambeau River biofuels heat sinqed, the pulp and paper mill will be the first pulp and paper mill in North America to become fossil-fuel free.

At Johnson Timber we utilize a small biomass boiler to produce the heat and steam required for the approximately 147 heating days at this facility. The biomass utilized by this boiler is bark from our manufacturing process. We have used this biomass for heat and steam for over 30 years so we can have that facility be virtually fossil-fuel free as well.

Our current plans to become fossil-fuel free at our facilities and continue to employ approximately 400 people through our organization in the forest products industry, however, is in jeopardy through the proposed stringent Boiler MACT rules.

Our main concern with the proposed rules is that the limits are not achievable. The methodology EPA is using to set emission limits is extremely stringent, often approaching levels that can barely be detected and unachievable.

The limits that EPA has set are unnecessarily stringent because they do not reflect the variability that occurs in real-world, best performing boilers. Boilers go through warm ups, shutdowns, load swings, fuel mix, fuel quality changes, control efficiency differences, and performance testing adjustments. When EPA relies on HAP test data from a short period of time, it is missing this inherent variability that occurs even at the most well-operated boilers.

Our rough estimate of \$1.5 million to attempt to get close to the limit for the main boiler at Flambeau River Papers does not even ensure that compliance will be met with these proposed limits. Flambeau River Papers is a small one-mill company that is striving to lead the forest products industry environmentally. We cannot afford to spend \$1.5 million on new control technology on one boiler. The expenses that this rule would create go directly to our bottom line. These rules are -- these are not expenses we can pass onto our customers. This rule will increase our costs and make us less competitive in the marketplace. Another problem with the rule is that the "other process gases category" restricts companies that are trying to move away from natural gas and other fossil fuels, like we are at Flambeau River Papers. These restrictions are going against the direction that our country is moving forward with.

Why would a company attempt to meet the lower limits required by this new category when higher limits are allowed for more traditional fuel sources. This other process gas category will inhibit companies like ours that are trying to meet other greenhouse gas agendas. Specifically for our company, this category creates limits we have not yet been able to find; even new equipment that we have investigated cannot meet these limits. Our biofuels project may not be able to move forward if these limits stand. Will any second generation biofuel project in the country be able to move forward? How many pulp and paper mills in rural America will have to shut down due to a lack of capital in today's economy?

The pulp and paper mills in North America have been utilizing renewable biomass fuels for many decades. Approximately 65 percent of the energy needs in our industry come from carbon-neutral biomass. It would be unfortunate for this proud industry to have to cut back away from carbon-neutral fuel and have to convert to fossil fuels to meet the proposed rules.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 12

Comment: One, EPA should use its authority in section 112(d)(4) of the Clean Air Act to set health-based emission limits to protect the environment and public health. In order for companies to deploy capital to the right mills, tests for compliance should be done on a facility-by-facility basis. With the many different types of boilers utilized by the industry, one size does not fit all.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 13

Comment: Do not penalize or discourage the use of clean, renewable fuels like biomass. Coal-fired boilers using coal and biomass are classified as coal boilers even though they may utilize 90 percent biomass.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 13

Comment: We support the work practices for natural and refinery gas units as proposed and believe that this approach should also extent to fuel gas from petrochemical operations. In the proposed rulemaking, EPA is taking comment on setting numerical emission limits for all gas-fired boilers and process heaters. In response, I'd like to summarize four specific points.

First, a sound national energy policy —national energy and regulator policy must recognize the important role gaseous fuels play, both in our economy and in reducing both conventional pollutants and greenhouse gases.

Second, it cannot have been Congress' intent for EPA to set emission limits or MACT floors for multiple hazardous air pollutants for source categories without addressing or demonstrating whether or not they are achievable in combination. For this rulemaking, there is no indication that any of the so-called best performers are achieving these standards today; and in fact, from the data collected, there isn't a single unit currently achieving all five emission limits.

Third, there are unintended consequences of proposing emission standards that would require the installation of control devices that have not been demonstrated to achieve the proposed numeric emission limits and that would, in actuality, increase energy consumption and increase emissions.

Finally, gas-fired boilers and heaters have extremely low emissions, pose little or not health risk to the public; and, therefore, EPA should use its authority to encourage their use by allowing work practices that give operators the flexibility they need to maximize combustion efficiency and thereby minimize emissions.

I'd like to provide some additional detail on these points. First, a vast majority of our industry's boilers and process heaters rely on clean-burning fuel, whether it's natural gas, refinery gas, or gas from our petrochemical operations for the efficient operation of our facilities. However, we are not alone as many other industries, institutions, and government facilities also rely on these gaseous fuels to keep this nation going efficiently. EPA should continue to recognize the benefit of these clean fuels.

Second, there appears to be a shift in the method that EPA is using to set emission limits, and we all know its name – Franken MACT. Franken MACT comes to life when EPA sets emission limits based on the best performing units on a pollutant-by-pollutant basis without considering whether or not those limits are achievable in combination. In fact, in this rulemaking, EPA has used emissions in calculating numerical limits that are at the very bounds of our ability to even measure the pollutant. As a result, there's not a single gas-fired boiler or process heater that's been demonstrated to meet all five of the proposed numerical emission limits for such units. It cannot have been Congress' intent for EPA to set emission limits without regard to feasibility. This is a drastic shift from EPA's historical technology-based approach which has been practiced and proven effective over the past 30 years. EPA needs to get back to setting achievable standards that are based on sound science.

Third, there are unintended consequences of requiring the installation of pollution control devices that have not been demonstrated collectively to achieve the standards. For instance, the proposed CO limits for gas-fired units will require operating at much higher oxygen levels than typical, which will lead to increased fuel use and, as a result, increased CO₂ emissions. This is also true for oil-fired units. In fact, emissions of all pollutants other than CO will also increase because of the increased fuel use. Remarkably, the proposal does not indicate how the low CO levels will be achieved. Are we to take this as an indication that EPA's own analysis shows that it's unachievable? To complicate matters, EPA has also included in this proposed rule precedent-setting energy assessment and ongoing energy management requirements that apply well beyond this source category which, we believe, will further highlight the inconsistency between the low CO levels and the optimum operation of boilers and process heaters.

Fourth, with regard to this rule, the Agency should avoid promulgating provisions that despite requiring significant capital and operating costs, will result in negligible emission reductions, could have the perverse effect of discouraging gas use, and could increase the emission of other pollutants. It's well known that gas-fired boilers and process heaters have very low emissions and pose negligible risk to the public. Therefore, EPA should establish final work practices as Congress intended in this situation, which give operators the flexibility they need to maximize efficient combustion and thereby minimize emissions.

In closing, we support work practices for natural and gas-fired — natural and refinery gas units as proposed and believe EPA should extend this to include fuel gas from petrochemical operations. While my comments today have focused on gas-fired boilers and heater, I should add that many of the same issues apply for liquid-fired sources as well. Our detailed comments will expand on points raised and will include additional information on the standards for oil-fired units.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 14

Comment: EPA needs to account for fuel and operational variability at biomass boilers -- you heard about that previously -- setting limits that reflect the real world variability of these boilers.

EPA needs to consider such issues as fuel sources, seasonal moisture variability, start-ups and shutdowns, and the ability to reliably maintain best performing emissions. The fact is that biomass fuels vary widely in fuel quality such as moisture levels from season to season. And even in northern operations we have to deal with such things as ice in the fuel.

For example, EPA should analyze and/or collect more long-term carbon monoxide CO data from existing CO monitors, rather than conclude from the short-term data and longer trends at only two boilers -- biomass boilers -- that CO performance is steady.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 15

Comment: When the court vacated the earlier ICI Boiler MACT rule and state and local permit authorities were faced with developing case-by-case MACT permits, NACAA collected existing test data from state and local permitting agencies. Over 40 agencies provided hundreds of data points that NACAA used to calculate MACT floors, which were substantially lower than those adopted by EPA in its earlier rule. The NACAA database was provided to EPA in June of 2009.

Many units combust mixtures of fuels. No clear correlation has been established to evaluate the emissions performance of different units combusting different mixtures of fuels --and indeed, when switching fuels, emissions of one HAP may increase while those of another HAP may decrease. In its model permit guidance NACAA considered only those results where a source was burning 100 percent of one category of fuel during the test. Under NACAA's recommended approach, sources would be separately tested for compliance with each applicable limit. NACAA also noted that during compliance testing, sources may be able to establish unit-specific correlations for operation of different fuels.

EPA apparently did not use the testing in the NACAA database to establish the MACT floors. The EPA data includes numerous entries where a source was combusting different fuel mixes, which NACAA believes will be difficult to translate into enforceable MACT limitations. While the NACAA and EPA data sets often produce generally consistent results, EPA cannot exclude from the calculation of the top performing 12 percent the testing conducted for other compliance purposes as required by state and local permit officials.

EPA's approach is to categorize source categories according to fuels that they are designed to combust and allow sources to comply with what EPA apparently considers the least stringent standard for any of the fuels that it may combust. NACAA believes that this approach is likely to be unworkable for many sources.

Several options have been proposed for which EPA offered little or no justification and analysis. Some are of doubtful legality --in particular, the clearly erroneous suggestion that EPA could establish risk-based exemptions at levels less stringent than the MACT floor. NACAA recommends that EPA avoid options that carry a substantial risk of a lawsuit that delays implementation of these important public health protections.

The proposal to not set a MACT floor or MACT emission limit for large, gas-fired boilers is another example. EPA's principal argument for it is that imposing MACT limits on gas-fired boilers doubles the anticipated cost of the rule. However, unlike the beyond-the-floor analysis, there is no cost test for the MACT floor. Moreover, EPA has apparently not considered or provided information in its proposal that would enable the public to evaluate whether excluding natural gas units from numeric MACT limits is in the public interest. Further, while the discussion of cost to the industry is extensive, EPA fails to analyze or calculate the full benefits of these rules to the public.

With respect to variability, without any justification EPA applies a statistical test that requires 99 percent confidence that a standard has been exceeded before a violation is established. EPA also appears to calculate this factor on the basis of variability of individual test runs, even though the applicable standard requires averaging three individual test runs to reduce the variability that would be present in individual runs. In other rules EPA has used a 90-percent confidence factor applied to the average of three runs to calculate variability. The general result of requiring a higher confidence level is that the standard is higher than it otherwise would have been.

In conclusion, the proposals are a marked improvement over EPA's earlier efforts. If the Agency follows the law and simply bases its decisions on the available data, very significant reductions of both toxic and criteria pollutants will result at costs that appear to be reasonable and manageable. NACAA urges EPA to complete these rules in a timely, thoughtful, and lawful manner.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 16

Comment: EPA needs to revise the data analysis to arrive at realistic standards. The data used in setting emission limits is heavily biased given the way it was collected and sorted. By requiring the best performing units to test, and then taking the best of that small data set, EPA's basis for limits is actually the top 1 percent and not the top percent as the law requires.

Only a handful of existing units can meet these limits and it's questionable whether any new boilers could actually meet the entire suite. Also, the EPA needs to apply better statistical approaches that align with the data sets.

Finally, the EPA needs to look at other available data to paint a more realistic picture of boiler performance and to make sure that any actual performing boilers can meet the entire suite of limits.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 18

Comment: EPA also has the authority in section 112(d)(4) of the Clean Air Act to set health-based emission limits to protect the environment and human health. This would avoid unnecessary controls where emissions of threshold pollutants are low enough to be safe.

We're encouraged that EPA invited comment on this, and we believe it should be adopted in the final rule on a facility-by-facility basis. The best way to target investments is where actual problems exist.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 20

Comment: The EPA's proposal to impose more emission standards on industrial boilers will cut across all sectors of the NAM membership, including the chemical, auto, metalworking, petroleum refining, and forest and paper sectors. New standards for industrial boilers will have an immediate impact on our members' bottom line.

In that regard, NAM and its members have an important interest in EPA's proposed Boiler MACT Rule and appreciate the opportunity to provide the following comments:

Manufacturers are attempting to fully recover from the steepest economic downturn since the 1930's and bring back the 2.2 million high-wage jobs lost during the previous recession. Federal policymakers should create conditions that will lead to economic expansion and not stifle the vitality necessary to create jobs and technologies that will continue to improve the nation's air quality. Imposing stricter mandates on the manufacturing sector will not accomplish any of these objectives.

While there are aspects of the proposed rules that the NAM supports, our overriding concern is that compliance costs associated with the more stringent Boiler MACT rule will hinder manufacturers' ability to add jobs as the recovery attempts to gain more attraction.

The NAM supports EPA's decision to rely on work-practice standards in lieu of emission limits for certain gas-fired boilers and believes that EPA should provide for work-practice standards on all gas-fired units within this rule.

The NAM believes that EPA's HAP-by-HAP approach to setting the MACT floor violates the Clean Air Act. EPA has essentially cherry picked the best data in setting each HAP standard without regard for the sources from which the data came. This results in a combined set of standards for purely hypothetical boilers that may never have actually been achieved by any single real world source.

EPA's new floor MACT policy is setting extreme limits that are drastically different than EPA's GACT limits which will confuse the public about the real health risks of such units.

Furthermore, the NAM believes that the data EPA gathered to support these rules were biased towards so-called top-performing facilities. This has resulted in proposed standards that are far too stringent and not representative of the subcategories to which they apply.

The NAM is continuing its review of the data and analyses underpinning the proposed rules and will be providing more complete comments once the review is finished. Manufacturers are particularly concerned about how EPA addressed the issue of the variability of the data. EPA's proposed limits may not appropriately address the variability in emissions of various HAPs.

In addition, NAM is examining whether EPA's proposed limits were unduly impacted by issues associated with the limits of detection.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 23

Comment: I am the Director of Utilities for the City of Orrville, Ohio, a small city of about 900 residents and a small coal-fired electric plant that would be subject to the Boiler MACT rule. I also testify today as the Chair of the Generators Group at American Municipal Power, which is composed of other small municipalities who also generate electricity primarily by burning local coal resources with increasing investments in hydroelectric and other renewable and energy efficiency projects. The Generators Group includes the Ohio cities of Painesville, Shelby, Dover, and Hamilton; and we help coordinate the concerns of other small municipal generators in other states. Together with my home city of Orrville, we represent a unique subset of the Boiler MACT source category because we generate electricity as part of our primary output. We operate as electric utilities, but we are too small to be included in the Utility MACT source category.

Municipal electric plants provide reliable electricity for public services, like police and fire protection, and for hospitals and schools. We also serve residents and businesses with electricity priced at the cost of generation. Low-cost electricity helps entice businesses to locate in our areas and long-term price commitments encourage businesses to stay and grow in our communities. In these difficult economic times offering reliable low-cost electricity is an important incentive for attracting and retaining jobs in our communities.

We have many concerns regarding the proposed Boiler MACT rule and how it will affect our operations.

First, we understand the Boiler MACT rule is due to come out before the Utility MACT rule, which means that our small municipal public power plants will be facing the cost of emission controls for hazardous air pollutants many months, if not years, before the investor-owned utilities. The timing of these two regulations places our generators at a significant disadvantage to the much larger investor-owned utilities. EPA can mitigate this burden by establishing a separate subcategory for small municipal utilities and setting a compliance schedule for us that is consistent with the schedule for large investor-owned utilities to comply with the Utility MACT.

Municipal electric plants are also concerned with the significant projected cost of the Boiler MACT rule. To install all the control equipment anticipated by the Boiler MACT rule would cost over \$20 million for our facility alone. We certainly understand how important it is to protect the environment, and as city officials, we are committed to providing a safe environment for our residents. However, we have to ask ourselves if this level of expenditure is necessary to protect our citizens and our environment. We think that this rule fails to strike the right balance between job preservation, and growth, and environmental protection.

The Clean Air Act offers U.S. EPA discretion in certain areas that can and should be used to help balance economic and environmental interests. Exercising this discretion is particularly important in difficult economic times as regulatory burdens can become the straw that breaks the economic backs of U.S. manufacturers and jeopardizes the jobs that are crucial to sustained economic recovery.

We ask that EPA exercise this Clean Air Act discretion with strength and vision to focus resources on serious health threats from air emissions and offer relief from economic burdens when such health threats are not indicated.

To relieve some of the burden for these boilers and process heaters, EPA should exercise the health threshold discretion that Congress allows under Section 112(d)(4) of the Act. Congress recognized that some pollutants are safe at low concentrations, and they allowed EPA to consider this health threshold when setting emission limits. Hydrogen chloride is a common acid and one of those compounds that is safe at low concentrations. EPA may use health risk information to test emission standards that reflect health thresholds so that we are not spending money on control equipment that is unnecessarily required to protect human health.

In these strained economic times, EPA should certainly exercise its discretion to stop the regulatory burden when health is adequately protected. This can reduce environmental expenditures by two to three million dollars per unit at each of our municipal electric plants.

The Act also allows less burdensome work practice standards when it is not feasible in the judgment of the Administrator to prescribe or enforce an emission standard. This is taken from Section 112(h) of the Clean Air Act.

We encourage the EPA to utilize this discretion as liberally as court decisions allow to relieve the burdens of emission standards, particularly where work practices provide effective emission control assurances at lower cost and burdens to the operators.

The Clean Air Act also provides EPA with broad discretion to subcategorize within the Boiler source category based on size, type, and class of source to help ensure that the emission limits are determined by the best performing similar sources and that the emission standard can be ultimately achieved in practice.

Then within the proper subcategory, EPA has the discretion to use a method for setting emission standards based on what real world best performing units actually achieve so that the units setting the bar for the rest of the subcategory will not have additional emission control obligations.

If the EPA were to use the discretion provided in the Clean Air Act, it could significantly alleviate the burden of this rule without compromising the environmental benefits that Congress intended. Flexible approaches in the Boiler MACT rule that appropriately address the diversity of units, operations, sectors, and fuels could prevent severe job losses and billions of dollars in unnecessary regulatory costs.

Two of our largest customers, the JM Smucker Company and The Quality Casting Company have sent concerns to lawmakers, and I'd like to offer a few of their comments.

Tim Smucker, Chairman of the Board and Co-CEO for the JM Smucker Company stated, our company has elected to remain in the Orrville community for many reasons, including low rates, reliable service, and community benefits of working with a city-owned and operated electric utility. The Orville municipal utility plays an essential role in the community to ensure competitive electric rates for residential and business customers as well as emergency services. Certainly, public utilities should be held to high standards as we work to preserve our environment, but such standards should reflect regulations that are industry and size specific. It appears as though municipal utility representatives have offered viable options to the EPA for alternative and effective regulations.

Our utility will continue its proactive efforts in the areas of improving plant efficiency while making investments in hydro and energy efficiency projects and participating in this rulemaking project. We all have the responsibility of developing standards that are realistic and economically achievable without sacrificing health risk.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 27

Comment: The total benefits far outweigh the costs of cleaning up. EPA estimates that the cleaner air from cutting emissions from major sources will save nearly 18 billion to over 43 billion each year beginning in 2013. Total capital costs for installing equipment on all of these boilers is estimated to range from 10.5 billion to 12 billion with total amounts for operations, maintenance, and other requirements of 3.9 billion.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 31

Comment: To go a little bit over the impact of the rules — sorry, the four rules on our operations, the rules will cover 32 boilers that we operate in 10 mills, both in liquid, the gas, coal, and biomass categories.

Let me start by saying the purpose of EPA in putting this rule is definitely a noble one. It is — and it will go a long way towards making America a world leader in environmental conscious actions.

However, the rule could in its present form have devastating impacts on both the pulp and paper industry in the entire manufacturing sector in the U.S. as the limits are way too restrictive, and in some cases, unachievable.

As was pointed out earlier, the data that was used to set the MACT floors ignores the vast majority of boilers and emissions data that exists out there. EPA needs to consider all of the data available to set the rules and not just a select few.

Also, the variability of the emissions need to be better considered, especially events of start-ups, shutdowns, and the variability in fuel mixes, the variability in steam loads, something that is very common in the pulp and paper industry.

As the rule stands now, even some of the boilers identified as top performers such as biomass boiler that we have at our facility in Kingsport, Tennessee, which was identified, as I said, as a top performer for CO, could not meet the rule standard at all times.

The rule discourages the use of biomass, and that goes against all of the efforts that Domtar has made to maximize the use of biomass and will likely cause us to reverse some of our — some of our practices, which will mean an increase in fossil fuel and increase in landfill of materials.

Some limits such as mercury, and dioxins, and furans were set using non-detectable test values, which could mean that at a facility that has never measured detectable amounts of these compounds could be in non-compliance. And to me it appears to be a little -- excuse me for the word -- silly to be in non-compliance with a compound that you have never measured in detectable quantities.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 33

Comment: On a financial aspect, the anticipated cost of the rule for Domtar will be well in excess of a hundred million dollars. Thirty percent of these costs, however, will be related to non environmental improvements such as redesigning stacks to account for the provisions of emissions averaging which do not allow us to average over subcategories when -- for boilers that burn similar fuels .

An example of this is one of our facilities burns -- has three boilers connected to a common stack. Two of them burn coal with tangentially fired units; the other one is stoker fired. They had different limits. Under the current rule we would not be able to emissions average these boilers; therefore, a significant amount of investment required to just separate the stacks in order to meet the rule. Again, these investments under the current rule would not benefit the environment at all.

And even after all these monies have been spent, we cannot guaranty EPA, our stockholders, our employees, our customers, and the public that we will be able to meet the rules at all time because of the issues of variability and -- excuse me -- and the fact that in some cases there are no investments or no technology that is existing out there to actually meet the requirements at all time.

And this is clearly in violation of our own environmental policy which states that we will meet all requirements at all time, and it will cause us to make harsh decision to the future of some of our facilities.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 36

Comment: The continued cumulative impact of EPA regulations is enormous and is putting our industry and many others at a cost disadvantage compared to our worldwide competitors.

The Boiler MACT as issued for my mill alone will require capital expenditures of at least \$20 to \$40 million and an annual operating cost will range from 4 million to in excess of \$7 million.

The Boiler MACT rules needs to be fixed. The rule, as proposed, will actually discourage industry from using biomass over more traditional fossil fuels or natural gas.

The database used to develop the rule contained some errors. If EPA used its discretion to set reasonable limits from good data, EPA would continue to protect public health without driving industry out of business with unrealistic control requirements.

It is critical that the EPA create more flexibility in the rule. We need this flexibility in order to choose more efficient alternatives.

Biomass boilers should be given special consideration. Biomass boilers are carbon neutral and beneficial to the environment. My mill has two biomass boilers. EPA should encourage the continued operation of biomass boilers. By setting unreasonable limits on these biomass boilers, EPA will drive industry toward fossil fuel when EPA should be favoring biomass use.

The top performer boilers were selected by individual parameters rather than considering the total performance of the boiler.

During the worst economic crisis since the Great Depression, this rule will impose an unsustainable regulatory burden.

This rule is more expensive than it needs to be and will ultimately result in more mill closures and job losses.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 38

Comment: The forest products industry has projected new equipment required in the proposed rules will cost more than \$6 billion over a three-year-compliance period plus billions more in subsequent years for operating and maintenance expense. Those capital costs alone exceed the profit in the recent years. At the Hueneme mill we recycle paper, manufacture new paper products and we burn primarily natural gas. And we're the first in the United States to install a functioning working NOx catalyst. However, efficiency efforts in recent years has prompted us to transport rejected process material and water treatment system residues, mostly biomass, for burning as fuel at a boiler at another site here in California, also likely to be affected by the Boiler MACT rule.

It is likely that the rules might make it so expensive to use these alternative fuels that its use will cease and we will have to find landfill space to dispose of an otherwise fuel. We believe that the EPA has significant discretion within the MACT program to make prudent and appropriate regulatory judgments -- judgments that do not unnecessarily burden American industry. We ask that EPA use this discretion, and we have identified three broad areas for improvement in the MACT rule.

First, EPA should set more reasonable limits that reflect the variability of real-world, best performing boilers. We believe the proposed Boiler MACT CO limit for boilers burning biomass in conjunction with coal will not be achievable as a practical matter.

International Paper has seven boilers that burn biomass in coal amounts at the rate of percent. They classify them as coal boilers under the proposal that would be subjected to unachievable CO limits. The CO limits for these combination boilers should be the same as the ones for the biomass boilers.

Second, EPA should base the Boiler MACT limits on more realistic data. The data used in setting emission limits is heavily biased given the way it was collected and sorted. EPA required the best performing boilers to test and then took the best of that small data set to the point where they represent the best-of-the best performers; that top 1 percent, not the percent as instructed in the law.

EPA should utilize its authority in Section 112(d)(4) of the Clean Air Act to set health-based emission limits to protect the environment and the public health. Health-based limits would avoid unnecessary over-regulation of emissions that are already within acceptable limits. We can ill-afford not to include such a health-based emission limitation given the economic implications of the rule.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 39

Comment:

Two particular components of the Boiler MACT regulation are of particular concern. The first is the lack of any health-based assessment. When the Clean Air Act was first developed, Congress established that lowering emissions further would only be necessary when there are clearly-defined health benefits. Without a health-based assessment, the regulation could require significant investments in actions that would not provide any corresponding benefit.

The second is the need for a real-world assessment of individual emission reductions on the overall boiler systems. Greatly reducing one component of a total emission can be done, but it may cause other emission values to vary. Best performing boilers — excuse me.

Best performing boilers should be identified on their overall capacity and capability, not on an emission-by-emission basis. Otherwise, it would in result in the establishment of standards that cannot be achieved.

Just in Virginia these regulations could impose an additional one billion in capital cost for manufacturers, increasing operating costs, and actually decreasing energy efficiencies. These monies spent to comply with this regulation would not substantially improve our air quality but will cost us jobs and future growth investments. We cannot afford to limit our ability to compete in the global marketplace by layering additional costly regulations on our manufacturing. The EPA should develop reasonable approaches to emission reduction. They should strive to achieve measureable health and environmental benefits. They should consider the investment of time and resources that will be necessary for compliance. They should include a health-based compliance alternative and a realistic review of the best performing units that can meet all the regulated pollutants. They must consider the impact on jobs, economic growth, and the global competitiveness of American manufacturers.

MeadWestvaco and our workers are committed to doing our part to protect and enhance the environment. We support reasonable, balanced efforts to responsibly reduce emissions. We hope the EPA will join us in developing solutions that do not harm America's manufacturers and manufacturing employees.

Just in review, our industry has lost 350,000 jobs since 2006. They lost a hundred thousand jobs in 2009 alone.

You know, us, as Americans, we've got to keep manufacturing here in the United States and produce good products so we can pay taxes and raise our families. And I ask that the EPA use discretion in their regulations and help keep our jobs in America.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0396
Comment Excerpt Number: 40

Comment: It is our concern that if Boiler MACT continues in its present form, the American forest products industry and the communities it supports will ultimately meet the same fate.

Our nation's recent economic down turn has not been very kind to the forest products industry. In the past two years, our industry's profits were approximately \$1 billion. Over 40 mills closed, and another 150 had to take idled down time. Tens of thousands of high-paying jobs have been lost, and the way of life as we knew it has drastically changed. The capacity of these mills has been shifted to emerging overseas' markets such as China and Brazil, where companies can operate with little or no environmental or labor regulations.

If these current standards are implemented, the cost to an already struggling industry will be devastating. As I have previously stated, our industry's profits were approximately \$1 billion. And that is for our whole industry, not just Smurfit-Stone Container -- the whole industry was \$1 billion. For the past two years that's about what we made.

To meet these new standards and be EPA compliant, our industry will have to spend approximately 6 to \$7 billion, and this could be the final blow to the American forest products industry, forcing our companies to close their doors, move their operations overseas. When this happens, we will not only have lost a high-paying, tax-generating jobs that help support our country, we will also be multiplying the very same emissions that we are trying to control in the first place, causing the American people to lose all the way around.

The forest products industry would be glad to work with EPA to protect both public health and jobs by targeting environmental investments where they are needed. We hope that the EPA will provide a more flexible approach in Boiler MACT rule and appropriately address the diversity of boilers, operations, sectors, and fuels it could meet -- it could meet its goals while preventing severe job losses and billions of dollars in unnecessary regulatory cost.

The motto of the PPRC is to seek a balance. And what we're after is we understand we have to have the environment for our industry to thrive. If we don't have good trees and we don't replant trees, then we won't have a place to work.

So, we need to seek a balance between these two things so that we can work and we can have our environment.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0396
Comment Excerpt Number: 41

Comment: In 2009 our Number 3 paper machine was shut down due to economic downturn. As a result of this shutdown, some 110 people were out of work for about a year. But it's not just the mills that are affected; there is a ripple effect on the jobs in the community as well. There are 4 to 10 jobs related to every one job at the mill. As a result, many other families were affected during the machine's downtime as well. Thankfully, this machine is back up and running in 2010, and most of the workers are back on the job. These jobs are so important to rural areas where median wages so very low even with mill workers' salaries figured in.

Georgia-Pacific Cedar Springs operation has spent more than a hundred million dollars in capital projects in the last five years. We have already spent over \$40 million on Boiler MACT. This was before the thing was vacated earlier, before the testing was done and updating and the boiler numbers were figured. To comply with the new figures that we're seeing, we will spend upward of another \$7 million.

I've painted you the picture of where I work and what we face, but there is a much larger picture. The paper and forest industry employs nearly 900,000 workers. The forest products industry has lost more than 350,000 jobs since the beginning of the downturn in 2006 — a hundred thousand of these jobs last year alone. Approximately 75 mills have been closed in the last five years. These mill closures were not due to Boiler MACT but the economy and foreign competition. China and Latin America are the major players and are not held to the same rigorous environmental standards as American companies face. We need a level playing field. The entire paper industry made only one billion dollars in the last two years, as you previously heard. The cost of Boiler MACT in the State of Georgia alone is going to be somewhere around \$520 million, and across the industry in the next two to four years could be 6 to \$7 billion.

The proposed Boiler MACT rule could damage the manufacturing sector's ability to recover during these hard economic times and is far more restrictive than needed to protect the environment.

Trees are the most powerful concentrators of carbon on earth. The paper industry does more to restore — to store carbon than any other industry. Carbon is stored within the product — paper, boards, wood, furniture. More trees are planted to help manage the forest, and the new trees help absorb more carbon. Forests and forest products absorb and store enough carbon dioxide to equal 10 percent of the annual carbon emissions in the United States in a year. On average, paper and wood product mills generate 65 percent of their own industry needs with renewable biomass. Our increase — the increased use of renewable energy has allowed the industry to reduce its use of carbon-intensive fossil fuels and purchased energy per ton of product by 19 percent since 2000. The industry has continually increased efforts to recover recyclable paper which saves space in landfills, reduces methane emissions, and minimizes waste. The forest product industry

is the leading producer of carbon-neutral renewable biomass energy and produces more energy from biomass than all the energy produced from solar, wind, and geothermal sources combined.

This is who we are, but most importantly, we're American workers trying to survive.

We hunt, fish, hike, and love the environment just y'all do. We all want clean air. We also believe in balance between protecting the environment and preserving American jobs. We believe this balance can be reached. We question how American industry and green jobs can continue with the high cost of environmental regulations. We ask that EPA examine the new limit and the long-term effect they will have on America's green jobs.

I thank you for your time, your assistance in helping save my job, community, and keeping green jobs in America by examining and raising limits on Boiler MACT.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 42

Comment: Let me start with the major source boiler rule. We want to thank and congratulate EPA for doing a good job on this proposal. This rule is going to take an important step to cleaning up the toxic emissions from refineries and chemical plants that is making our air unsafe and unpleasant to breathe. And this is a long time in coming. These rules are 10 years overdue. No previous administration, no previous administrator would take this step. This one did, and we appreciate it very much.

Especially important to us is EPA's decision to eliminate the outrageous malfunction exemption that has caused so much distress in so many communities around the community.

Let me go into some detail on this. At refineries and chemical plants it is well established from state emissions data that there have been decades of routine violations of emission standards during so-called malfunction events.

When these events happen, the neighboring communities are blanketed in toxic emissions. People are made sick immediately. They lose work days. They have to visit doctors and seek medical care that many can't afford. Their children miss school. And because the emissions are so toxic it also increases their chances of catastrophic health effects like cancer and birth defects.

Now, this exemption has been ruled unlawful by a Federal Court of Appeals. We hope that EPA will be taking it out of other rules but taking it out of this rule which governs thousands of major

sources of hazardous air pollutants, including many of the worst abusers of the exemption, will go a long way by making them run their sources cleanly or be held accountable; and we think this is very important.

Now, we know that industry lobbies are lining up against this rule. They want exemptions. They want delay, and they want the rules weakened. So let me just focus on something that EPA itself concluded. The major source boiler rule will save 4,800 lives every year -- 4,800 lives that would be lost prematurely if this rule were weakened or as industry seeks, there were a health-based exemption thrown in. And that's just the tip of the iceberg because when EPA counted the number of lives that would be saved, it only looked at the emission reductions of fine particulate matter.

It didn't look at the 7 tons of mercury that would be reduced or the literally thousands of tons of lead and arsenic and chromium that we reduced, or the dioxins, or the formaldehyde, or the benzene. Yet all of these things have very serious health effects. These metals can cause cancer. So can benzene and formaldehyde and dioxins. Mercury can cause birth defects and developmental damage in children. So, if the real health effects were taken into account, we'd be looking at a lot more than 5,000 lives saved. We don't know how many it is because EPA doesn't quantify or monetize it.

But let me get back to the monetization also because those 4,800 lives are worth billions more than the cost to industry will be. In fact, by EPA's calculations even with just 4,800 lives the ratio is about 5 to 1 or 10 to 1 in terms of benefits to costs. It would be far more overwhelming if the full benefits were calculated.

So, if we have one thing to say on this issue, it is to Administrator Jackson. Thank you for the good work, but this is nothing more than the law requires. We're glad you're doing it. Hold the line. Do not cave in to industry pressure and get this rule out at least as strong as it is, stronger in some cases, and without delay.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 46

Comment: With relatively new installations and modern technology, the Fairmont and Menominee mills commenced operations in the mid nineties and have built a reputation as a market-leading source for high-quality RBK.

As the national economy continues to recover from the recession and the unemployment rate hovers at near 10 percent, the Clean Air Act rules recently announced by the EPA will be economically unsustainable for the pulp and manufacturing community and the high-paying jobs it provides unless greater flexibility is allowed in meeting targets.

Due to the methodology EPA is using under the reissuance of Boiler MACT rule, the emission limits are expected to be exceedingly stringent, approaching levels that can barely be detected.

Even boilers using clean fuels like biomass, such as ours in Michigan and West Virginia, which I'll discuss in further detail later, will be subject to ultra low emission levels that will be unreasonably burdensome to meet if they can be met at all.

Achievement of the limits established in this rule would require installation of up to four different air pollution control devices that will conflict with other existing control requirements and will impose tens of millions of dollars in unnecessary capital costs at thousands of facilities around the country.

The standards for new boilers are so stringent that boiler manufacturers cannot guaranty compliance, which will assuredly stifle investment in new systems that feed economic growth.

The total capital costs for the forest products industry alone are estimated around 7 billion for the next two to four years, which I heard mentioned earlier. And the cost for all manufacturing could be 20 to 50 billion. Those are huge numbers.

In Michigan and West Virginia, the states where SKF has operations, the boiler MACT costs for the forest products industry are expected to be approximately 270 million and 20 million, respectively. Those numbers are staggering by themselves, but take into account that the entire forest products industry only made one billion dollars in each of the last two years.

This will result in severe hardship and tens of thousands of job losses in the forest products sector alone. Given the cost of other likely environmental programs, the compounded effects will result in hundreds of thousands of job losses in a sector that lost 350,000 jobs since 2006.

If this rule remains in its current form, SKF's plans to invest \$300 million in two industrial scale projects converting both its U.S. mill operations to renewable biomass cogen facilities will be lost. The new facilities would include bubbling fluidized bed boiler system and condensing extraction turbine generators designed to produce approximately 31 megawatts of renewable electricity for the region and also supplying the facilities' thermal requirements, replacing natural gas.

The cogeneration facilities would be fueled 100 percent by woody biomass or a combination of wood and recycled pulp mill residue. Significant investments have been made in both states to secure proper engineering and design, environmental permitting, electrical interconnection, and fuel availability studies.

The two projects would take approximately two and a half years to complete and include the hiring of 400 contract employees to help in construction, with an additional 60 employees hired for operation of the facility.

The local logging and trucking industry can expect to see an additional 200 jobs to carry the increased load. We want to continue with this project.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 48

Comment: To position the mill for the future, earlier this year we announced plans for a proposed 650,000-pound-per-hour biomass boiler. If the project moves forward it would support our goals to use biomass-based energy, improve efficiencies and solidify the long-term viability of the company. The electricity generated by the boiler would qualify as green power and displace fossil fuels. We are working toward approval of this project by the end of this year.

The proposed Boiler MACT rules would be cost prohibitive for our company. As defined today, the equipment needed to meet the proposed limits would easily kill the project. Additionally, our existing boilers would have to remain in service. These are older units with higher emissions and would incur a very high burden to try to reduce their emissions to retrofit.

In the state of Washington the cost to our industry is estimated at \$210 million. The proposed rule would be devastating to the forest industry as a whole. This is an industry that employs more people nationwide than automotive or chemical industries. Across the U.S., Boiler MACT would impose a monetary burden of to \$7 billion on the forest products industry as well.

Comparatively, the industry has only profited \$1 billion over the last two years. It's not very hard to see that that sort of imbalance from a cost to improvement ratio is hard to sustain.

In discussing the proposed rule with the boiler manufacturers, we learn that the technology required to comply with the new rule does not exist. Today, we cannot purchase a new boiler that would meet all of the proposed MACT emission limits. And since the new limits apply to any boiler purchased after June 4th, it effectively leaves us in limbo. It is not logical to us to require a company with solid environmental performance, in a industry known to be based on renewable resources, to comply with the rule as currently written. If the new rule goes into effect in its current form, the EPA is putting jobs in our community and business in general at a great risk.

It would impose extremely costly controls where there is no real environmental or health benefit. The EPA's proposed limits in Boiler MACT often approach levels that can barely be detected and, in many cases, are unachievable. They fail to target the areas where improvement can be made and instead require installation of multiple air pollution control devices that conflict with other control devices in existence.

Our mill has a long history of installing pollution control equipment prior to regulation and that is well below scientifically supported emission. We support efforts to address serious health threats from air emissions and believe the EPA can craft regulations that sustain both the environment and the people that work. Unfortunately, the rule proposed does not accomplish these objectives. If the EPA were to provide more flexible approaches in the Boiler MACT rule, we believe it could achieve its goal and our administration's goals of energy independence while preventing severe job losses.

We urge the EPA to consider the following. First, use a reasonable method to set the MACT limits based on what real best performing units can actually achieve. Second, EPA should revise its approach for biomass boilers to ensure that these boilers are not penalized because they start with a cleaner fuel. Third, EPA should include a health threshold standard in the final rule to target environmental investments where there is a real need based on a rigorous demonstration of pollutants like hydrogen chloride and manganese do not pose an adverse risk.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 50

Comment: In regards to the Boiler MACT, SierraPine supports the work practice approach for existing natural gas-fired boilers. However, SierraPine does not agree with the procedure used for setting the Boiler MACT floor by selecting the limits on a pollutant-by-pollutant basis rather than looking at the overall best performing units.

Over the range of pollutants, the EPA has set limits that are inconsistent with, essentially, the Clean Air Act. That is, the emission limits should be achievable in practice for the best performing sources. In some subcategories, the emission limits as proposed will require even some of the best performers to install additional add-on equipment.

In any case, as should be the case with Boiler MACT facilities should have the option to comply with an emission limit for the HAP of concern rather than the surrogate; e.g., as an example, POM in lieu of CO.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 53

Comment: The work practice approach proposed by EPA for Gas 1 sources is appropriate and CIBO strongly supports its use; however, it should be expanded to encompass most, if not all, of the Gas 2 sources and distillate fuel oils.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 55

Comment: U.S. EPA database at facilities with boilers and process heaters is significantly in error and fails to list numerous facilities. For example, in Wilmington you left out Tesoro Oil Refinery, Valero Oil Refinery, Ultramar Special Products Refinery, which is an asphalt facility, and the Valero Wilmington Asphalt Plant. In the city of Carson, which is not in the database, is the BP Arco Oil Refinery, the ConocoPhillips Asphalt Specialty Products Facility, the Equilon Enterprises Asphalt Facility and the Tesoro Refinery Marketing Salt Recovery Facility.

In the city of El Segundo you left out the Chevron Oil Refinery. In the City of Long Beach at the Port of Long Beach you left out an incinerator facility, which I don't know the name of but it's there. To give you a quick reference, you can see by this map that was put together by the California Air Resources Board. Going back in 2005, Wilmington was part of a study to identify toxic sources.

This one right here shows you different little dots that identify the various toxic sources. And what I'm referring to here is that Wilmington is a poster child for having the most significant human impact resources in one community. The next step that we were supposed to do was a follow-up in doing a ground trooping that had anything else that was missing, but ARB has not continued the project since that time, and so we only have achieved up to this point -- and I will be submitting a copy of this map in a smaller volume and a digital format so that you do have it.

We request that the U.S. EPA validate its boiler and heater facility list with state regulatory agencies such as CAL-EPA, California Air Resources Board and our local HMDs and, in our particular case, South Coast Air Quality Management District.

If the U.S. EPA boiler facility list is off by at least ten major facilities in Wilmington, that means the total emissions inventory is also significantly underestimated by at least ten times. And if the emissions inventory is estimated by at least ten times, that means our health impact assessment and the numbers that are coded are also underestimated at least by ten times in our community.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 56

Comment: I'm the Environmental Health and Safety Manager from American Woodmark. We're a kitchen cabinet —kitchen and bathroom cabinet manufacturer with 11 manufacturing facilities across the country.

I wasn't going to speak today, but as I sat here listening to the comments — the broad range of comments that we've had today — I felt it necessary to get across what some of my thoughts were.

I've heard the reference to a breathing member of the community several times today; and I'm a member of that community as well as my family. And I want clean air as much as anybody else. However, we need to strike a balance.

In my position I often hear the comment, are they trying to regulate business out of this country. And our business has been cut in half over the last couple years as we are tied directly to the housing market. And we're also under increased pressure from the regulatory side from both OSHA and the EPA. And these new regulations do come at a price, despite what many of the speakers, I believe, felt here today. Industry does not have unlimited resources and funding.

Regulations such as this put a heavy burden on industry and will drive many manufacturers out of business and to other counties.

I urge you to, you know, to strike a balance with these regulations and work towards a cleaner environment but help — you know, help us, you know, stay in business and stay in the country.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 57

Comment: In Virginia, we are glad that the EPA has proposed to take steps to reduce toxic air pollution from commercial boilers. We hope the Agency will go further and be stricter in its regulation of such facilities in the future, ensuring that there are no loopholes leaving our communities vulnerable to their dangerous pollutants.

The new rules will substantially reduce emissions of hazardous air pollutants and the risk of serious health effects, including cancer, reproductive disorders, and birth defects in the communities across our state and the country.

Boilers that burn coal and waste material are an antiquated, highly destructive way to produce energy. EPA action to crack down on toxic pollutants, including mercury, that come from small coal boilers — especially those that many college campuses continue to use — is well overdue. The new rules will require significant, welcome upgrades at many of the campus coal plants across the nation, including both the University of Virginia and Virginia Tech.

The new rules will protect students and residents who live near and downwind from those coal — excuse me — coal-burning boilers. Emissions of toxic air pollution such as mercury, arsenic, cadmium, and acid gases, would be significantly reduced. These pollutants are extremely dangerous, and EPA's actions will help remove thousands of pounds of toxics from the air, including 15,000 pounds of mercury and tens of thousands of tons of acidic gases that cause breathing problems, particularly in vulnerable individuals like children and the elderly. About 36,000 asthma attacks could be prevented each year and result in approximately \$18 to \$44 billion in health savings annually, according to the EPA's analysis.

Mercury is an extremely dangerous neurotoxin that can impact a child's ability to walk, talk, read, write, and learn. The mercury problem in the United States is so pervasive that one in six women today have mercury levels in their blood high enough to put her baby at risk, according to the EPA. High mercury levels have also been linked to an increased risk of heart disease in men.

We need drastic reductions in toxic pollution and greenhouse gas pollution, and these boilers are a major source of this pollution, even if not individually, then cumulatively. There are nearly 14,000 major source boilers alone around the country. Even the smaller types of boilers burning coal and waste present a grave threat to human health and the environment. Toxins like mercury and selenium are harmful even in small doses, and many of these facilities are located in very highly populated areas.

Students at Virginia Tech have been working to transition from the current coal-fired steam plant on their campus to clean renewable energy by 2020. The student organization, Virginia Tech Beyond Coal, has grown in numbers and influence on campus through consistent public education of the health and economic issues of burning coal for energy. The campaign is contacting the university administration to begin finding a solution for ending coal use on its campus. We expect that a similar campaign may be taken up at UVA to move their campus off coal and avoid jeopardizing the health of their students, faculty, and the larger community.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0397
Comment Excerpt Number: 58

Comment: I am concerned that your list of toxic facilities with boilers or incinerators is not accurate and complete. Your list doesn't include BP-Arco Oil Refinery. It also doesn't include specialty product oil refineries such as: (A) ConocoPhillips Company, Carson Refinery. (B) Equilon Enterprises, LLC, Shell Oil Products U.S.A. Desoto (phonetic) Refinery and Marketing Company, a sulphur recovery plant. Specialty products include sulphur recovery facilities and asphalt refineries.

Point two, as a result, your boiler toxic emissions are significantly underestimated in my environmental justice community of Carson.

Point three, therefore your public health risk assessment is also significantly underestimated and must be updated and a monitoring system must be implemented.

Four, your definition of a major source is not acceptable. Environmental justice communities want the same air quality standard for all facility boiler air pollution sources.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0397
Comment Excerpt Number: 60

Comment: But a comprehensive database has to be developed with the due diligence for future generations with regards to the health assessment that we are asking for.

It's just -- Wilmington and Carson, specifically in the harbor area, it's really affecting our lungs, our air quality for our breathing, for our young people that you see here today. And we would like to see a health risk symposium comprehensive environmental justice compact with the written policies that will be submitted before you, the honorable EPA Agency, by August 3rd.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0397
Comment Excerpt Number: 61

Comment: My name is Sofia Carrillo. I am speaking as a member of the Coalition for U.S. Environment in L.A. community. I have discovered several problems with your proposal.

The amendment -- excuse me, the number of facilities is not correct in my environmental justice community. Your database does not link to oil refineries near to my home that have boilers and release hundreds of tons of air pollution every year.

Valero Oil Refinery is not on your list. Tesoro refinery is not on your list. So your inventory air pollution inventory is only an estimate. If your inventory is on there -- is underestimating. The public health risk assessment is significantly underestimated. Your definition of the main source of ten tons is not acceptable in my EJ community because we have many toxic sources and no pollution is acceptable when you (inaudible) to toxic source.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0397
Comment Excerpt Number: 62

Comment: As a community representative, this ruling is very much in our thoughts. The major source ruling for emission control is good and will dramatically affect our environment in a good way.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 62

Comment: As a resident of D.C., it's always fairly disappointing to see on every rank card that D.C. scores an F in every air toxic category there is out there, which is why I'm really specifically concerned about rules that impact the air community.

So, first off, I wanted to thank the EPA for coming up with a MACT rule for boilers and incinerators that's really strong, and, I think, protective of communities throughout the country.

I think when we're thinking about air toxic rules it really is about protecting public health, especially in communities that have been over burdened across this country. And we're talking about a number of different issues here in terms of refineries, chemical manufacturers, and other industries across the country.

I just spent the last week in Texas — in Houston, Texas; Port Arthur, Texas, Bay City, Lake Jackson, and other areas. And these communities are disproportionately impacted, certainly, by a number of air pollution issues, including the malfunction piece.

And in this particular rule it's been really nice to see that that loophole has been closed. And, hopefully, this is going to be finalized; this will protect communities across the country from basically being poisoned by polluters.

This isn't about over-regulation or jobs. This really is about saving taxpayers and the U.S. Government millions — actually billions of dollars a year in terms of missed school days, missed work days, emergency room visits, respiratory arrest. There are several — I think it's 4,800 unnecessary deaths are going to be avoided by instituting or finalizing the MACT rule. And that's certainly been something that we're encouraged to see in the environmental and also the public health community.

So, first off, I want to thank you for that and hope that you guy promulgate a rule that continues to suggest that it will be protective of communities throughout the country.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 64

Comment: Dow Chemical, ExxonMobile, two superfund sites, toxic chemicals floating on our ground water and hundreds of permitted and non-permitted facilities, and two major freeways surround our impacted community.

The major sources that surround our community, we are very grateful that finally some standards are coming out. It's a long time coming and we appreciate that.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 68

Comment: [Question from panelist] You mentioned a cumulative impact analysis. Do you have information available as to how that's being carried out?

MS. BABICH: I think that if you look at the California EPA process that's going on they have a Cumulative Impacts Precautionary Approaches Work Group that we fly up to Sacramento to be a part of. And what they've just finished wrapping up, along with some assistance from the University of Berkeley and Dr. Amy Kyle, is really looking at the data gaps that are out there.

And I don't necessarily mean that we need to spend 40 years collecting more data. We obviously need to move forward on the data we have. But they have a very good process and she's a very commendable toxicologist who can actually give us an honest opinion. That's what we're looking for. We don't need to fudge it one way or the another. But let's really look at where we are and see where these data gaps are so that we can make better informed decisions. So I would say that you might want to plug into that or Dr. Joe Lew (phonetic) from the California Environmental Rights Alliance who couldn't be with us here today. He has been working as a representative of E.J. communities on that panel and I'm sure that he could give you information in a way that would be easier for you to process than I can probably do at this time.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 68

Comment: The Sierra Club's Environmental Justice and Community Partnership Program, EJCP, has provided support to more than dozens of low income and communities of color in their environmental justice struggles. We work to — we work with low-income and communities of color to overcome environmental assaults on their lives and communities. The Sierra Club's work is national in scope. We were founded in 1892, and we have about a million members, yet it has a grassroots presence everywhere in the country. It is volunteer based and operated and includes professionals willing to devote their volunteer time to build local communities as well. We have successfully built such bridges in our EJCP partnerships program in El Paso, Detroit, Flagstaff, Memphis, Minneapolis, New Orleans, Washington, D.C., and the Appalachia region and in Puerto Rico, bringing together Sierra Club volunteers, staff, affected community members to strengthen the fight against environmental injustices.

We want to thank EPA Administrator regarding the Major Source Boilers Rule. We want to thank EPA Administrator Lisa Jackson for taking this step to control the toxic air pollution from chemical plants, refineries, paper mills and other industrial sources that are making our air unsafe to breathe. EPA's new rule will finally make the largest of these facilities control the emissions from their boilers and process heaters. It is really about time. These standards are 10 years overdue. Across the country families and communities need protection these rules will provide.

In addition, once again we appreciate Administrator Jackson's emphasizing environmental justice as one of the main priorities during her tenure. Many environmental justice communities, such as the 48217 Detroit community in which the Sierra Club EJCP program works will greatly benefit from this new rule.

Especially important to us is EPA's decision to eliminate the outrageous malfunction exemption. State's emissions data have made it clear that chemical plants, refineries, and other polluters violate their emissions standards routinely during so-called malfunction events. During these events they blanket neighboring communities in toxic pollution, making people sick and forcing them to miss work, miss school, and seek medical help. These events also increase the likelihood that the people in these communities will suffer from cancer, birth defects, and other catastrophic adverse health effects. The malfunction loophole has already been held unlawful by a Federal Appeals Court. Closing it will bring an end to the abuse by ensuring that polluters can be held accountable when they violate emission standards.

One great example of that is in Corpus Christi, Texas, where it has been documented that some of the major releases — you can actually document by the major releases the next day the number of children in emergency rooms. And you can also document the time lost by their parents from work by the number of children who are in emergency rooms and the fugitive releases and other releases in the communities in the evenings.

We know that powerful industry lobbies are lining up to oppose these rules. They want the loopholes and exemptions. We want the rules — they want the rules weakened and delayed.

These rules will prevent about 4,800 unnecessary deaths each — every year and will save billions of dollars in costs — medical costs, time costs, costs to communities in terms of lost time and lost — and lost ability to externalities to be able to work, live, and play in a safe environment.

The benefits overwhelm the costs by a ratio of between 5 and 10 to 1. And that's only the tip of the iceberg. It only reflects the health benefits by reducing major source boilers' emissions of fine particulate matter. It doesn't count the benefits of eliminating more than seven tons of mercury emissions every year that cause birth defects in babies and developmental damage in young children, or thousands of tons of lead, cadmium, and other metals that are known as suspected carcinogens, or the dioxins and other organic pollutants that cause cancer.

Thus our message to Administrator Lisa Jackson is don't cave in to industry pressure. Make this rule stronger, not weaker, and issue it without delay.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 71

Comment: Western States Petroleum Association [WSPA] echo the testimony of NPRA and others and support work practices for natural and refinery gas units as proposed and believe that this approach should also extend to fuel gas for petroleum operations. A sound national energy and regulatory policy must recognize the important role gaseous fuels play both in our economy and in reducing conventional pollutants and greenhouse gases.

We do have a concern, though, with respect to oil-fired plants and that's the key reason why I'm here today. We believe that it was not Congress's intent for EPA to set emissions limits or MACT limits for multiple-air pollutants designated as hazardous without demonstrating whether or not those limits are achievable.

For this rule-making there does not appear to be any indication from the data that even one of the best performers is achieving the proposed emission limits today. Now, we all understand there are often unintended or adverse consequences of proposing emission standards that would require the installation control devices that have not been demonstrated to achieve the proposed numeric emission and that would, in reality, increase energy consumption and very possibly increase emissions.

This proposed regulation affects Hawaii in a particularly draconian fashion because they do not have natural gas or gas supplies available and the option of switching to a different fuel does not exist. Hence, it seems infeasible for those facilities to comply with the proposed standard. This is clearly an issue where compliance is simply, physically, not possible.

As others have said in previous hearings, EPA's proposal sets emission limits based on the best performing units on a pollutant-by-pollutant basis without considering whether all of those limits are achievable in combination. This approach differs from EPA's historical technology-based approach that has been proven effective in the past 30 years. The impact of this approach is to, perhaps, unintentionally make the MACT limits unachievable.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 74

Comment: We want to thank the EPA for this effort to further regulate significant sources of air toxics such as refineries, chemical plants and the burning of solid waste. However, we have some substantial concerns over aspects of these proposed regulations. These industrial sources of pollution are ubiquitous throughout the Los Angeles region and, in many cases, are located in low income areas and communities of color. For instance, of the roughly one dozen refineries in our area, most of which are associated with very high health risks, all but one are located in communities of color. Many of these facilities are poorly using boilers that are decades old and contribute to a lot of pollution, both locally and regionally.

We definitely appreciate the EPA's efforts to control polluting boilers and process heaters at large facilities. In particular, we support the exclusion of exemptions for malfunctions, finally ending a loophole which allows emission sources to smother communities with pollution in blatant disregard of standards. We urge the EPA to reject calls to reopen this and other exemptions that undermine the health standards of this new regulation.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: David Meeker

Commenter Affiliation: National Renderers Association

Document Control Number: EPA-HQ-OAR-2006-0790-0937.1

Comment Excerpt Number: 1

Comment: The National Renderers Association (NRA) is the trade association of the rendering industry. Its 51 member companies operate more than 200 rendering plants in the United States and Canada. Our members account for over 90% of North American production by independent renderers and integrated packer/renderers (those that process their own by-products). Boilers are used throughout the rendering industry using oil, natural gas, and processed fats. The stringent restrictions placed on boilers in the proposed rules raise much concern throughout our industry.

The proposed rules (referred to herein as the “Boiler MACT” or the “Rules”) set stringent emission limits for hazardous air pollutants from industrial, commercial, and institutional boilers that combust fossil fuels and biomass. Because of the broad sweep of the Rules and ultra-low emissions levels they impose, even for boilers using relatively clean fuels like natural gas and processed fats, we are concerned about the negative impacts of them – both economically and technologically. In terms of the economic burden, the capital cost expenditures are estimated to be in the tens of billions of dollars at thousands of facilities across the country. This is more burden than industry can bear in these economically challenging times. A wide range of sectors and the jobs they sustain would be severely harmed – universities, small municipalities, food product processors, furniture makers, federal facilities, and a wide range of manufacturers and other businesses that operate gas, liquid, or solid-fueled fired boilers.

Regarding our technological concerns, the new Boiler MACT methodology establishes emissions standards that are more stringent than what real world best performing units can actually achieve. In some instances, the emissions limits approach levels that can be barely detected with current technology. Also, the Boiler MACT is expected to require installation of up to five different air pollution control devices that will conflict with other existing control requirements. EPA should not ignore the practical capabilities of controls and the variability in operations, fuels, and testing performance across the many regulated sectors.

EPA can provide reasonable approaches in its proposed Rules that will improve air quality and target investments where they are most needed while preventing severe job losses and billions of dollars in unnecessary regulatory costs.

First, EPA should allow facilities to demonstrate that emissions of certain pollutants do not pose a public health concern. A practical health oriented standard for threshold pollutants would allow sources to demonstrate their emissions of these compounds pose no adverse risk. The Clean Air Act in §112(d)(4), expressly contemplates the use of such an approach which can be implemented without sacrificing risk reduction benefits. A health threshold standard is critical to

the future viability of biomass and other boiler fuels. EPA has indicated to stakeholders that this alternative will not be part of the proposed rule language. EPA should revisit this thinking and make the health threshold standard an integral part of its proposed Rules and allow an opportunity for public comment on this approach.

Second, EPA should propose a reasonable method to set the MACT limits based on what real best performing units actually can achieve. The method EPA is using to set the MACT emission standards is seriously flawed. Projected emission limits are close to the detection limit of test methods and far beyond what normal best performing units can achieve. EPA is looking at only the best of the best units without latitude for variability among the extremely diverse universe of units and fuel use. Thus, EPA is setting the stage for an over-reaching regulation that will again be challenged for ignoring the practical capabilities of combustion units and controls. EPA must factor into the Boiler MACT the variability in operations, fuels, designs, and testing performance across many types of boilers.

The Boiler MACT should be better tailored to protect public health and the environment without imposing unnecessary burden and controls. We ask that the Boiler MACT proposal provide a neutral presentation of a range of technically sound and cost-effective options and emission limits to foster robust public comment. NRA appreciates the opportunity to provide these comments and would be pleased to discuss these matters with you further at your convenience.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Chris Williams

Commenter Affiliation: Steely Lumber Company, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-0936.1

Comment Excerpt Number: 1

Comment: The proposed Boiler MACT rule includes emission limits for industrial, commercial and institutional boilers using fossil fuels and biomass approaching levels that in many cases can barely be measured. The Boiler MACT proposed rule would require installation of up to four different air pollution control devices that will conflict with other existing control requirements.

Across the forest products industry, these rules could cost \$6 to 7 billion over the next two to four years. This will result in severe hardship and thousands of job losses in the forest products sector. The costs to individual mills could be tens of millions in additional capital expenditures.

I am writing representing Steely Lumber Co., Inc., a family-owned southern pine sawmill company that has been in business since 1896 and currently employs close to 90 people. We currently operate two wood byproduct fired boilers that just barely go over the threshold for this new rule. We operate and comply to TCEQ regulations, but this new MACT rule would likely cost us near \$2 million dollars to comply with. This is a hit that we could not recover from. This

would force us to consider new alternatives to dry lumber and would likely put us out of business. I strongly suggest the EPA reevaluate the proposed rule.

The EPA should take the following next steps: halt the proceedings and complete an adequate data validation and analysis for all four rules, get the additional data needed to properly represent the population, re-propose the rules if necessary and obtain adequate time from the court to be able to pursue these rulemakings in the Agency's customarily professional manner.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 2

Comment: Our initial evaluations of the proposed rules indicate the cost impacts will be a serious challenge to most of the current running mills.

Additionally, the cost impacts hit just as the economic conditions might otherwise allow facilities that currently are shut down to restart. For example, extreme costs may prohibit restarting some of our wood-product facilities that were curtailed due to impacts of the recession on the housing market. This result -- this result would be opposite to the administration goals of rebuilding jobs. It would be a devastating blow to the families and the communities dependent on these facilities.

In fact, to give these costs some scaled perspectives, the Wood Products Council, in which we are members, compiled a projected cost to comply with the proposed rules for some 34 broilers at forest product industry facilities in the State of Mississippi where my mill is located. Those costs projections totaled \$290 million. And incredibly, that amount is more than a quarter of the total forest product industry's profits in 2008 and 2009 in the U.S.

While I'm not ready to discuss specific cost projections for my facility, the figures for the forest product industry in Mississippi are indicative. In Philadelphia, we would need to consider adding on at least three control devices to address at least four of the five hazardous air pollutants that EPA has proposed

to strengthen and regulate on the Boiler MACT group, and we would have to do so not knowing whether the controls with extremely low levels of pollutants such as mercury and dioxides would be effective or could even be measured with certain. There's got to be a better way. What we'd like EPA to do with the cost impacts for the rules that are proposed so large, and numerous technical issues that others will detail, we urge EPA to make this a win-win and use its discretion and improve the rules significantly to reduce the compliant's cost. Weyerhaeuser believes EPA can do this by adjusting the stringency of the limits, by modifying its approach to defining what is technically achievable, by allowing use of health-based compliance alternatives where appropriate in lieu of the hydrogen chloride and manganese limits as EPA did in the original Boiler MACT, by establishing an exclusive work practice or other approach for limited-use boilers, by streamlining the performance tests, monitoring and other compliance demonstration requirements such as that are aligned with emission testing and reporting requirements for other air emission regulations by streamlining performance --

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 5

Comment: In our area in Alabama where it's 16.4 percent unemployment, and in Mississippi, we're at 12.3 percent unemployment. We survived, Scotch Plywood did, and we have rehired and we're back in full production. We contributed to the safe -- we think -- environmental responses in a responsible manner. We have complied with the plywood MACT and now we're faced with the Boiler MACT.

Our estimate of costs is going to be somewhere in excess of \$2 million to comply as the Boiler MACT is presented today. Waynesboro, Mississippi will have to spend around a half a million dollars and

increase our costs -- our guess, best guess -- is two and a half percent. That doesn't seem like much. That's a small number, two and a half percent, but our margins are small, and nonexistent the last year and a half, the other way. So we're forced to look at other decisions. The decisions for us is pretty simple. We'll make this investment, which will exceed \$2 million at the two facilities in the current -- or our best estimate of the future economic environment, and we make partial investments and run economically at a reduced rate at both facilities or close our facilities. So as we look at that, B and C cause us to lay off personnel significantly impacting our local communities. Unemployment nationally is 9 and a half percent; we're in excess of 12 to 16 percent. We will get back to the housing starts, economically, we will, but we'll -- or we're going to regulate ourselves out of being competitive. That's the question that we -- are we going to continue to have our production capacity to our neighbors to the south, South America? Most importantly, what Scotch Plywood would like to be consider is the public health option that was considered in the plywood MACT, also available for the Boiler MACT.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 7

Comment: We support work practices for natural- and refinery-gas units, as proposed, and believe that this approach should also extend to fuel gas from petrochemical operations. A sound national energy and regulatory policy must recognize the important role gaseous fuels play both in our economy and in reducing conventional pollutants and greenhouse gases.

With regard to oil-fired units, it cannot have been Congress's intent for EPA to set emission

limits, or MACT floors, for multiple hazardous air pollutants without addressing or demonstrating whether or not the limits are achievable in combination. For this rulemaking, there is no indication from the data collected that even one of the "best performers" is achieving all the proposed emission limits today. There are unintended consequences of proposing emission standards that would require the installation of control devices that have not been demonstrated to achieve the proposed numeric emission limits and that would, in actuality, increase energy consumption and increase emissions.

API/NPRA members have oil-fired boilers and heaters located in Hawaii, Alaska, and U.S. island territories, areas that do not have gas supplies available, where the option of switching to a different fuel does not exist. The overly stringent proposed standards for oil-fired units will likely mean that a number of existing boilers and heaters will have to be replaced with new units due to the infeasibility of retrofitting existing units with pollution control devices capable of achieving the proposed standards. We are operating in a business climate in which our members are evaluating their operation assets to determine whether they will remain economically viable. A regulatory mandate for significant capital investment to replace equipment and install new controls could well contribute to a decision to simply shut down some facilities.

Second, there appears to be a shift in the method that EPA uses to set emission limits and we all know its name... Franken MACT. Franken MACT "lives" when EPA sets emission limits based on the best performing units on a pollutant-by-pollutant basis without considering whether or not those limits are achievable in combination. In fact, in this rulemaking, EPA has used emissions in calculating numerical limits that are at the very bounds of our ability to even measure the pollutant. This is a drastic shift from EPA's historical technology-based approach, practiced and proven effective over the past 30 years. EPA's new floor MACT policy is setting extreme limits that are drastically different than EPA's proposed GACT limits, resulting in confusion about the real health risk of such units. EPA needs to return to setting achievable standards that are based on sound science.

There are unintended consequences of requiring the installation of pollution control devices that have not been demonstrated collectively to achieve the standards. For instance, the proposed CO for gas- and liquid-fired units will require operating at much higher oxygen levels than typical, which will lead to increased fuel use, and as a result, increased CO₂ emissions. Remarkably, the proposal does not indicate how the low CO levels will be achieved. Are we to take this as an indication that EPA's own analysis shows that it is unachievable? To complicate matters, EPA has also included in the proposed rule precedent-setting energy assessment and ongoing energy management requirements that apply well beyond the source category, which we believe will further highlight the inconsistency between low CO levels and the optimum operation of boilers and process heaters.

In closing, we support work practices for natural- and refinery-gas units, as proposed, and believe EPA should explicitly extend the work practice to include fuel gas from petrochemical operations. EPA should establish achievable limits for oil-fired units, giving operators the flexibility they need to maximize combustion efficiency and thereby minimize emissions. Our detailed written comments will expand on the points raised and will include additional information on the standards for both gas and oil-fired units.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 13

Comment: MR. DeLaCRUZ: My name is Ricardo De La Cruz, and I am from Edinburg, Texas. I'm a member of the Pulp and Paper Research Council and I have worked at International Paper for the past 25 years. Here we make corrugated board which is made into corrugated boxes. These are used to package citrus produce to tomatoes

televisions, et cetera.

We have two containers and a sheet plant in the county of Hidalgo, Texas. In total, our plants provide 200 green jobs in our county. Many mills around the country with good and safe linerboard supply us. If these mills were to shut down on the impact of the border MACT rules, we would be forced to get our linerboard from China or South America. We have testimonial that the linerboard is tainted with mercury or lead. The American public would not like to have these products packaged in these containers which contain mercury or lead.

Last week, we received a box made in Mexico with linerboard from China and no one wanted to touch it for the fear it was tainted with mercury or lead. Do we want this product coming into the United States? This is the effect of the ruling of MACT and what it would hold.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 15

Comment: The proposed Boiler MACT rule would hit the Coastal community very hard economically. Coastal's cost to comply might approach \$40 million of capital costs, which would be a tough pill to swallow for a company that is in a super-competitive, low-margin industry, and whose annual sales is only \$200 million. Additional annual operating and maintenance costs could approach \$2 million a year. Fortunately, Coastal is one of the best performers in the industry and would probably figure out a way to stay in business. However, I can assure you that many companies in our industry, most of whom have lost millions of dollars over the past three or four years, would choose to simply stop the bleeding and shut down.

Coastal wishes to make six points regarding the proposed rule: One, not enough data. Coastal generally agrees with EPA's subcategorization of

units, but the resulting large number of subcategories fractured the database into pieces that are too small to be used to confidently establish appropriate limits. Coastal believes that Congress's intent was that EPA be confident that the limits it sets are appropriate. EPA cannot be confident that a limit based on only one or two stack tests is appropriate.

Second, the data is skewed. When EPA recognized that it lacked sufficient data, it required selected units to generate more data. Those units were generally better performing units so the proposed limits reflect performance of the best 12 percent of the best rather than performance of the best 12 percent of the entire population as Congress intended.

Third, too much non-detect data.

Non-detect data heavily influenced the proposed limits. For example, for D/F, for biomass stokers, all six test runs are non-detect, and four of six are non-detect for TEQ D/F. Coastal doubts that EPA is confident that the proposed limit is appreciated as intended by Congress. Low emissions that are on the same order of magnitude as the test detection limit should be deemed insignificant and have no limits.

Fourth, the pollutant-by-pollutant approach is wrong. Coastal believes that Congress intended the best performing 12 percent units be determined based on all pollutants combined, not pollutant-by-pollutant as proposed. Coastal requests that pollutants be weighed based on -- weighted based on relative toxicity, that weighted emission totals be calculated for each unit, and the best performing 12 percent be determined based on those totals. Few, if any, boilers can comply today with the proposed rule principally because of the proposed pollutant-by-pollutant approach; certainly not half of the 12 percent or 6 percent. By definition, at least 6 percent would be able to comply today as Congress intended if limits were based on the total emissions of the best 12 percent units.

Fifth, conversion to natural gas. The proposed rule would cause many biomass boilers to convert to natural gas because that would be the only option they could afford. If Coastal switched, its annual natural gas cost would be \$10 million a year and 150,000 tons of wood fuel would pile up somewhere. If all U.S. softwood panel and lumber producers switched,

the annual cost would be \$1- to \$2 billion, we would consume 1- to 2 percent of total U.S. natural gas withdraws, which would significantly disrupt the natural gas market, and 20 million tons of wood fuel would be piled up somewhere to rot, which definitely wouldn't be green.

Number six, the final rule should include an option for health-based standards. The proposed rule would force many harmless rural facilities that pose absolutely no risk to human health or the environment to either install unnecessary and costly controls or shut down. Coastal encourages EPA to establish health-based emission limits to be applied on a facility-by-facility basis in order to avoid control where it can be demonstrated that emissions are safe.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 20

Comment: The forest products industry is a very significant business in Texas, particularly in the eastern quarter of the state, and in 44 counties of deep East Texas we have three -- the three remaining paper mills are located in deep East Texas. They employ 3,500 workers directly, and the industry is as a whole employs about 54,000 workers across the state, and I think we heard from one of those this morning from a box plant in the valley.

The industry is distributed throughout the state. It is dependant upon the East Texas forest for its raw materials and is a rural industry and an industry that is not concentrated largely in industrial areas of the state. And so I wanted to point out, that as the rules stand, they could have significant impact on rural economies, because it's not -- not a ship-channel issue for the forest products industry. The second point I wanted to make is just to reiterate the biomass issue. The boilers that are in use in the pulp and paper mills, in this state, have

gone predominantly to biomass rather than natural gas or other fossil fuels. We are trying to push for carbon neutrality. We have a great deal of biomass available in Texas for use in our boilers and we are adapting that as much as we can.

We would like the EPA and the other -- both state and federal governments that are responsible for energy policy to pull together and to see if -- if -- make sure that what we do in one area doesn't impair the incentives that are in place for biomass use. And we would just urge EPA to look at that issue and to make sure that all of these policies are running consistently with each other.

And the third issue I would like to -- to also just reiterate that AF & PA will be helping to provide the data that you -- you seek with regard to the health -- health-based emission issue, and we pledge to work with you on that and see if we can help you focus on that issue with some good data, and we will be helping to provide that.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 21

Comment: The proposed Boiler MACT rule could strike a severe blow to the manufacturing economy and is far more than is needed to protect our environment. The cost to individual mills could be tens of millions of dollars in additional capital expenditures, which may not be sustainable given the down the economy and fierce international competitiveness. No other country in the world is imposing requirements like these putting U.S. manufacturers at a competitive disadvantage.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0985
Comment Excerpt Number: 25

Comment: Georgia-Pacific supports efforts to address serious health threats from air emissions, and supports regulations that sustain both the environment and the nearly 900,000 men and women that our industry employs. Unfortunately, the rule proposed by EPA in June does not accomplish these objectives. Georgia-Pacific is prepared to work with the EPA to protect both public health and jobs by targeting environmental investments where there is a real need. If the EPA were to provide more flexible approaches in the Boiler MACT rule and appropriately address the diversity boilers, operations, sectors, and fuels, it could achieve its goal while preventing severe job losses and billions of dollars in unnecessary regulatory costs.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0985
Comment Excerpt Number: 32

Comment: Boiler MACT, as proposed, would cost the forest products industry billions of dollars and MeadWestvaco tens of millions of dollars over the next two to four years. These new investments could mean job losses in the United States and could force production to be moved to countries where the environmental standards are much lower than our current practices. We encourage the EPA to develop reasonable approaches to maintain emission reductions. Any reasonable approach should: Strive to achieve measurable health and environmental benefits, consider the investment of time and resources that will be necessary for compliance, and consider the impact on

jobs, economic growth, and the global competitiveness of America's manufacturers.

Here's how MeadWestvaco believes that EPA should proceed with the Boiler MACT regulations. First, finalize clear definitions. EPA has proposed a series of four interrelated rulemakings. Due to the nature of definitions, affected sources, and how EPA has chosen to view the data, it is impossible for EPA to accurately determine the data sets to use in setting the limits and thereby equally impossible for sources to understand how they are affected to determine what steps are required to comply. MeadWestvaco believes that EPA should first finalize its definitions of solid waste, and then determine which sources fall into the boiler categories and which sources fall into the solid waste incinerator category. Then EPA can more accurately interpret the existing data and collect more as it is needed and propose standards in a meaningful fashion.

Next, ensure the highest data quality.

EPA has collected significant data over the past several months. It has worked to make that data available for review. As the public has reviewed this data it is clear that EPA needs to perform additional quality assurance to ensure that the data is accurate. Data review has found inconsistent treatment of non-detect values, improper classification of boilers, and gaps in data that could be improved with additional quality assurance. MeadWestvaco believes that this step is crucial before EPA can realistically propose such standards.

Next, consider whether proposed limits are achievable. The Maximum Achievable Control Technology Standards are driven by very good controls that also result in achievable targets. In its rush to complete these standards, EPA has allowed the process to become a mathematical exercise that is not based on achievability. By its construct, the standards are intended to be set based on the average of the top 12 percent performers in a source category. MeadWestvaco believes that by its data collection methodology, failure to consider adequate variability of operating conditions, and failure to fully evaluate all of the data it has, EPA has proposed a rule that fewer than one percent existing boilers can achieve. The situation is worsened when reviewing the new source standards that even EPA is predicting will result in no new biomass or

coal burning facilities. MeadWestvaco believes that EPA should revisit its methodology for establishing these standards and propose standards that are achievable. Next, include a Health Based Compliance Alternative. EPA included options in the original standard to allow sources to demonstrate an alternative standard that was protective of health and the environment. EPA has chosen not to do so in the proposed rules. Further, it has set up a nearly impossible standard to meet in the Preamble to the Boiler MACT Rule, if it were to consider such an alternative. MeadWestvaco believes that EPA has an obligation to ensure that standards it requires are imposed due to a reasonable risk to the health and the environment and not due to a mathematical exercise. Last, impose an adequate timeline for compliance. EPA has proposed a three-year compliance timeline for sources. We believe that this timeline is inadequate due to the number of affected sources and the fee engineering solutions available to industry. We are committed to going our part to protect and enhance the environment. We support reasonable, balanced efforts to responsibly reduce emissions, and we hope that EPA will join with us in developing solutions that do not harm America's manufacturers and manufacturing employees.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 34

Comment: I would use the EPA term "absurd results" to describe the boiler proposals. As an example, the proposed dioxin limits for a clean biomass boiler are as much as four orders of magnitude lower than the standards in place for hazardous incinerators. I believe that is an absurd result.

Facilities that originally met the very conservative health-based compliance option must now

install a series of control device costing millions of dollars. Without a health-based compliance alternative, most wood products facilities would either close down or purchase natural gas boilers, which can be obtained at a fraction of the cost of the required control.

The biomass fuel would then be sent to a landfill where it would degrade to methane. The Boiler MACT concludes there will be no biomass boilers constructed major sources. That would be an absurd result, given the government's push for renewable energy.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 40

Comment: The major source floor data for biomass includes much data from boilers burning significant percentages of materials other than biomass, including natural gas, heavy oil, tire-derived fuel, and undefined sludges. Each of these materials has different combustion characteristics and different levels of fuel-based HAPs. It would be technically incorrect to consider this as a representative of biomass combustion. EPA should set limits for biomass boilers based on data from units burning only biomass.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 44

Comment: The regulations are extremely stringent and approach levels that are barely

detectable. The methodology used by the EPA to define the regulatory levels do not, in my opinion, accurately reflect real world conditions or operations. Boilers in the real world are subject to a significant number of operating variables including changes in fuel conditionings, operating load swings in the manufacturing operation being served, controls efficiency just to name a few.

My experience has been that when control devices are added to a piece of operating equipment, the control devices introduce additional operating variability that make consistent outcomes more difficult to achieve. Biomass boilers utilize clean wood residuals as the fuel, and that fuel is inherently cleaner than many other types of fuel. That creates a low base line of emissions and the cost to reduce those levels to even lower regulatory limits is disproportionate to the benefits achieved.

The proposed regulations will negatively impact the use of biomass fuels for industrial boiler use. The wood products industry has been using clean wood residuals as a primary fuel for decades. In other words, we were green before green was cool. The current administration touts the use of biomass fuels as part of the new energy policy. On one hand, the USDA has given away over \$148 million under the BCAP program for fuels that were already being used and now these regulations will restrict the use of these biomass fuels in the future. Any new business models that may be contemplating the use of biomass fuels may find the cost of the regulation prohibitive. To me this is another case of one body of government not acting in concert with the direction of another body of government.

Conversion of a wood products plant to natural gas is not economically viable. In our case, we have calculated that the increase in operating costs to use natural gas to be \$31 million annually. That would be a 34 percent increase in operating costs at a time when the industry has sustained multiple years of losses, and would not be economically sustainable. The Regulatory Impact Analysis does not accurately measure the impact on smaller plant facilities. By combining all plant facilities together, the conclusions drawn do not represent the economic impact to smaller operations. The cost of capital investment to install control is disproportionate when comparing a facility that

generates \$100 million in annual revenue to a facility that may only generate \$50 million in annual revenue. The equipment cost is -- the equipment cost does not correlate to revenue and the ability to absorb the capital cost is a disproportionate penalty to the smaller plants. The Impact Analysis contains only data through 2007 and thus ignores the most devastating impact on shipments, employment, and other operating parameters by not including the worst years of this recession, which have been 2008 and 2009. If one looks at the capacity utilization chart, Figure 2-15, one can visually see that the elimination of 2008 and 2009 data will skew the data and impact any conclusions drawn from it. The criteria used to classify an "establishment" as large versus small is based on number of employees. This is not a good methodology, in my opinion, since some manufacturing processes are labor intensive and others are highly automated. Production capacity and emissions volume do not necessarily correlate to facility employment.

The collapse of a new housing markets and the recessionary decline in the U.S. economy has severely impacted the wood products industry. I would estimate that 35 to 40 percent of the industry capacity has been curtailed or shut down. These regulations will further reduce the probability of many of these facilities restating when economic conditions improve.

In addition, I would predict that the economic cost of complying with these new regulations will cause new closures as small privately held sawmills and plywood operations and other wood products businesses come to the conclusion that trying to sustain an operation that has had multi-year losses is simply not a good decision. These closures will disproportionately impact rural lower income communities.

In our business, lumber prices have fallen 31 percent since the peak in 2005. It will be difficult to rationalize the cost of installing additional control equipment when that capital does not produce any benefits to the business, and in fact will make U.S. producers less competitive against off-shore suppliers from Brazil, Chile, and China. No other nation in the world has the environmental costs that we have in the United States.

I am not anti-environment, but at some point, if the cost of achieving improved environmental metrics is the destruction of an economy then some balance must be achieved. The EPA has the opportunity to strike that balance by doing the following: One, ask the court for more time to refine the relations and

achieve a more reasonable set of rules. Two, use EPA discretion to protect public health while avoiding unnecessary capital and operating costs. The estimated costs for the wood products industry, for the installation of control devices, is \$6- to \$7 billion. We must ensure that the benefits derived from this expenditure are real, and not just estimates by a panel of experts who vary widely on their estimates of benefits.

Three, set health-based emission rules that reflect the true impact on people. Four, change the methodology used to determine what the ideal MACT boiler would operate like. The EPA's approach severely biased the data and is not representative of the current universe of operating boilers and in conflict with the law.

I will conclude by anticipating that some interest groups will characterize my comments as a typical strategy of crying "poor man" when faced with new environmental regulations and costs. After suffering multiyear losses, the smaller privately held business -- businesses are in fact poor.

To those who would attack my comments as a typical business reaction, I would invite them to walk in my shoes with the responsibility of trying to sustain a company in the worst economic conditions of the past 70 years and maintain good paying jobs with good benefits for over 1,000 families.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 46

Comment: I'm here today first to applaud the EPA for its increased standards on general emissions with large plants. It's something that we definitely need.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 49

Comment: Our industry is like any other industry struggling to recover. Our forest products industry has been struggling to recover from the recession. Our unemployment rate is still lingering around 10 percent. The Clean Air Act rule was recently announced -- specifically, Boiler MACT -- could be unsustainable for much of the U.S. manufacturing processes, and also, the very high paying jobs that it provides, unless there can be some greater flexibility allowed in meeting these targets.

Let me also say, the forest products industry, in general, in my 20-year tenure, definitely supports any -- and tries to address any serious health threats from the air emissions and supports regulations that sustain both the environment and nearly a million jobs that our men and women enjoy.

Unfortunately, a proposed rule was proposed on June 4th, does not accomplish these objectives. The Boiler MACT, as published on June 4th, would strike a severe blow to our manufacturing economy is far more stricter than needed to protect the environment. EPA has the opportunity, and in my view, the responsibility, to meet -- to modify the requirements and still be faithful to its legal obligations under the Clean Air Act.

The Boiler MACT would require installation of up to four different air pollution control devices, and those would serve -- conflict, in some cases, with some of our existing controls. The cost to individual plants, such as the one that I work at, would be -- could be as much as tens of millions of dollars in additional capital, which may not be sustainable, given the economic downturn and the fierce international competition. And let me just say that. The fierce international competition.

No other country in the world is imposing

requirements like these, which puts -- which makes a very unlevel playing field for us. It puts us at a huge competitive disadvantage. Across the forest products industry, these rules could cost anywhere from \$6- to \$7 billion over the next two to four years when the industry itself only made a fraction of that over the last two years.

This would result in the severe hardships, and something that I'm very passionate about, could cost tens of thousands of job losses in the forest products sector alone. And given the cost of other likely environmental programs, the compound effects of the -- the compound effects in job losses would be much larger in a sector that's lost 350,000 jobs since the downturn began in 2006. It's much greater than that when you go back to 2001 and 2002.

We've identified several of the broad areas for improvement in Boiler MACT. First of all, we encourage that the EPA has invited comment and gives Section 112, which allows facilities to avoid controls where risks of structural pollutants like gases and manganese are shown to be safe. We believe this approach should be adopted and a final rule for use on a facility-by-facility basis.

That's a surefire way to target investment to only where problems exist, and it's absolutely imperative that we take a health-based approach, given the economic implications of this rule.

Secondly, the limits that EPA has set are unnecessarily stringent because they do not reflect -- the variability occurs in real world best-performing boilers. These boilers go through warm-ups, shutdowns, load swings, fuel mix, and fuel-quality changes. When the EPA relies on the -- on the test data from a short period of time, it's missing the inherent variability that occurs in the real world even at -- even on some of the best operating boilers.

Third, the data used in setting emission limits is heavier by the top-performing units given the way it was collected and sorted. This was borne out by the fact only a handful of the existing units, indeed all the limits, can you expect 12 percent of the thousands of boilers in this country to achieve limits -- to achieve those limits according to the law. EPA needs to look at other available data to paint a more realistic picture of boiler performance for each of

the hazardous particulates in this subcategory. Finally, federal limits for biomass are set extremely low because the baseline and emissions are very low compared to other fuels. Emissions and hydrogen chloride and dioxin and mercury are present in very small amounts in wood and are inconsequential sources of the pollutants, yet the costs to achieve these very low levels become exponentially more expensive and can't be consistently achieved. The limits are unduly influenced by HAPs that could not detect that the HAP-suggested emission limits should be dropped or at least be replaced by realistic work practices. So we believe that first the EPA should use a reasonable method to set the max limits based on what real best performing units can actually achieve. EPA must factor into the MACT of variability and operations, fuel, designs, as I previously stated, and the performance across the main different types of boilers. Second, the EPA should revise its approach from biomass boilers to ensure that these boilers are not penalized until they start with a cleaner fuel. And third, the EPA should include a health-structural standard in the final Boiler MACT rule to target environmental investments where there is a real need based on rigorous demonstration of pollutants like hydrogen chloride, manganese, and not pose an adverse risk.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 61

Comment: First, EPA should set more reasonable limits that reflect the variability of real-world best performing boilers. We believe the proposed Boiler MACT CO limit for boilers burning biomass in conjunction with coal will not be achievable as a practical matter. International Paper has seven boilers that

burn biomass with coal in amounts greater than 10 percent that classifies them as "coal" boilers under the proposal that would be subjected to unachievable CO limits. The CO limits for these combination boilers should be the same as the ones for biomass-fired boilers. If we continue to encourage and expand use of renewable, carbon neutral biomass in this country, the rule needs to change dramatically.

Second, EPA should base the Boiler MACT limits on more realistic data. The data used in setting emission limits is heavily biased, given the way it was collected and sorted. EPA required the best performing units to test and took the best of that small data to represent the best performers; the top 1 percent, not the top 12 percent that the law instructs.

Third EPA should utilize its authority in section 112(d)(4) of the Clean Air Act to set health-based emission limits. Health-based limits would avoid unnecessary overregulation of emissions that are already well within acceptable levels. We can ill-afford not to include such a based health-based emissions limitation given the economic implications of this rule.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 65

Comment: The PPRC logged over 255 curtailments with mill closures in 2009, on our Web site, pprc.info. On the May 2010 unemployment report just released, the rate of 9.7 percent unemployment is facing our nation. Our manufacturing facilities do not need this new financial burden placed on them by these new proposed EPA rule changes. There are 23 forest products boilers and 115 more boilers across the great State of Texas. With the proposed changes, the protected cost to change these boilers to meet the new proposed rules are estimated at \$1.89 billion just for Texas alone.

Boiler MACT will set emissions limits for hazardous air pollutants from gas, liquid, or solid-fuel fired boilers and process heaters located at universities, in small municipalities, food product processors, furniture makers, federal facilities and a wide range of manufacturers, not just the forest products industry. The EPA's proposed Boiler MACT is so stringent that it will result in significant and unnecessary job losses if finalized in its current form. It would impose extremely costly controls even where there is no significant environmental or health benefits, which is contrary to the direction Congress provided in the Clean Air Act.

The paper and forest products industry currently employs nearly 900,000 workers. The forest products industry has lost some 350,000 additional -- or 350,000 additional jobs since the beginning of the downturn in 2006, 100,000 jobs lost last year alone. Approximately 75 mills have closed in the last five years. These mill closures were not due to Boiler MACT but the economy and foreign competitors. China is one of the major players and they are not held to the same rigorous environmental standards these American companies are. We need a level playing field. The entire U.S. paper industry only made \$1 billion in the last two years.

This imposed -- this imposed cost will cut more American jobs. The PPRC believes that the forest products industry will be greatly affected. Most of the paper companies across our nation are in rural areas of the states where the backbone of our nation has an agricultural base. We do not need to see these forest products jobs go away. We need to keep America working because we are American workers trying to survive. With these new costs coming so close on the heels of the recent economic downturn, the would be unavoidable and severe financial distress and economic disruption for the workers, families, and communities for whom paper and wood products companies are the primary, or the only economic engine. My mill boasts a payroll of \$70 million and more than \$4 million is paid annually in property taxes, which mainly benefit the local school districts. There are sales taxes in excess of \$909,000 and approximately \$350 million spent in vendor supplier-wood relationships.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 79

Comment: When the court vacated the earlier ICI Boiler MACT rule and state and local permit authorities were faced with developing case-by-case MACT permits, NACAA collected existing test data from over 40 state and local permitting agencies, including hundreds of data points that NACAA used to calculate MACT floors, which were substantially lower than those adopted by EPA in its earlier rule. The NACAA database was provided to EPA in June of 2009.

Many units combust mixtures of fuels.

When switching fuels, emissions of one HAP may increase while those of another HAP may decrease without clear correlation. In its model permit guidance, NACAA considered only those results where a source was burning 100 percent of one category of fuel during the test.

Under NACAA's recommended approach, sources would be separately tested for compliance with each applicable limit. NACAA also noted that during compliance testing, sources may be able to establish unit-specific correlations for operation of different fuels.

EPA apparently did not use any of the testing in the NACAA database to establish the MACT floors. The EPA data includes numerous entries where a source was combusting different, which NACAA believes will be difficult to translate into enforceable MACT limitations. While the NACAA and EPA data sets often produce generally consistent results, EPA cannot exclude from the calculation of the top performing 12 percent the testing conducted for other compliance purposes as required by state and local permit officials.

EPA's approach is to categorize sources according to fuels that they are "designed to combust," and allow sources to comply with what EPA apparently considers the "least stringent" standard for any of the fuels that it may combust. NACAA believes that this

approach is likely to be unworkable for many sources and may not be legal.

Several options have been proposed for which EPA offered little or no justification and analysis. Some are also of doubtful legality; in particular, the clearly erroneous suggestion that EPA could establish risk-based exemptions at levels less stringent than the MACT floor. NACAA recommends that EPA avoid options that carry a substantial risk of a lawsuit that delays implementation of these important public health protections.

The proposal not to set a MACT floor or MACT emission limit for large gas-fired boilers is another example. EPA's principal argument for it is that imposing MACT limits on gas-fired boilers doubles the anticipated cost of the rule. However, there is no cost test for the MACT floor. Also, EPA has not included information in its proposal for the public to evaluate about whether excluding natural gas units from numeric MACT limits is in the public interest. Further, EPA's cost discussion fails to analyze or calculate the full benefits of these rules to the public.

With respect to variability, without any justification EPA applies a statistical test that requires 99 percent confidence that a standard has been exceeded before a violation is established. EPA also appears to calculate this factor on the basis of variability of individual test runs. This is in contrast with a 90-percent confidence factor applied to the average of three runs to calculate variability, as used by EPA in other rules, and as required by the applicable standard. The general result of requiring a higher confidence level is that the standard is higher than it otherwise would have been.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 80

Comment: Several of the proposed limits approach unachievable levels of -- to the point of being absurd. For instance, some of the proposed emission limits approach levels which can barely be detected, with industry-standard testing devices.

Fossil versus biofuels. The forest industry has been, and continues to be, the largest consumer of biofuels.

The rule as proposed ironically would impede environmental progress that many companies are achieving through greater and more efficient use of carbon-neutral biomass and would force the use of fossil fuels, which is face far less stringent requirements under the proposed rule.

Norbord suggests that the EPA requires this approach to recognize the carbon-neutral contribution of the biomass boilers in existence and ensure that these boilers are not penalized because they used an inherently cleaner fuel from the start. Boiler diversity. The December final rule fails to recognize the extent of the boiler diversity in the industry. The rule as written will entail extremely expensive fixes; in some cases, may not be achievable. If the EPA were to provide a more flexible approach in Boiler MACT, its goals could be achieved without unnecessary regulatory costs and potential for loss of jobs. Realistic standards. Norbord feels that a reasonable approach would be to set emission standards based on the best-performing units -- that the best-performing can currently achieve. For example, the rule fails to target areas where improvements can be made, and instead requires installation, in some cases, of up to four different air and pollution control devices, which will conflict with other existing pollution control requirements.

Willingness to work together. Norbord proposes greater effort be made to involve industry experts in establishing technically sound and cost-effective options and emission limits. Facilities should have the option to avoid installing controls where risk analysis determines emissions are within safe limits. EPA's goals can be achieved without excessive regulatory compliance costs which could cripple industries to compete internationally. We can do the reasonable thing now rather than resort to court challenges later.

And finally, costs. The rule will substantially increase compliance costs. The proposed

changes come at a time when mill closures/curtailments have reduced OSB board production by nearly 50 percent. Regulations that do little to improve the environment eventually threaten jobs and can lead to permanent rather than temporary closures.

And I close on a personal note. Norbord has two OSB mills in Texas; one located in Nacogdoches, the other at Jefferson. Within the past three years, Norbord has invested over \$10 million at each location on PCWP MACT improvements. Unfortunately, the Jefferson mill was closed indefinitely January 2009 due to economic conditions (our products are used directly in the housing industry). One hundred employees lost their jobs. The decision to re-opening this mill will be measured against several factors, not the least of which would be additional capital investment to meet more stringent environment standards.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 86

Comment: At NewPage, we have 27 boilers impacted by the proposed Boiler MACT rule; 12 solid fuel, three liquid fuel, and 12 natural gas. Even though many of our solid fuel boilers currently have state-of-the-art controls, they still will not consistently meet the proposed Boiler MACT standards.

We are in the process of reviewing and conducting detail site-specific engineering review to determine the Boiler MACT compliance costs for NewPage. However, preliminary cost estimates for NewPage indicate capital expenditure of greater than \$100 million, and potentially several million dollars in additional annual operating costs for these facilities. These costs are significant and will put NewPage at a distinct disadvantage as we compete in a global marketplace with other paper producers located in jurisdictions that do not have to comply with these requirements. EPA needs

to be including flexibility options that allow for alternate compliance approaches. To address areas of concern while minimizing regulatory compliance costs, we recommend following flexibility improvements.

EPA needs to include the use of Clean Air Act Section 112(d)(4) to establish health-based emission limitations on a facility-by-facility basis using a reasonable demonstration method without unnecessarily complicated procedures. This will target environmental investments where there is a real need.

EPA needs to include a total select metals unit as an alternative compliance approach for the proposed PM standard. EPA needs to provide alternative organic HAP limits for units that coke-fire coal and biomass. These units are being penalized under the proposed subcategories. Our units that fire more than 10 percent coal and biomass are placed in a coal subcategory, but will have trouble meeting the organic HAP limits. As a compliance strategy, units may have to switch away from biomass and burn more coal. This unintended consequence of replacing biomass and fossil fuel is contrary to national policy and encourages the use of more renewable biomass fuel.

EPA needs to include further subcategorization to address small or limited-use units. EPA needs to maintain the work practice standard for natural gas. For determining the MACT floor, EPA needs to use emission information that is representative of the subcategory, and takes into account unit operating variability and how best-performing units perform across the HAPs being regulated. EPA has used a "best of the best" data set and has "cherry picked" the best data to establish the proposed limits on a pollutant-by-pollutant basis. This approach has resulted in very stringent limits that are not reflective of the actual performance of one or more units.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 89

Comment: At the Luke mill, we have three boilers impacted by the proposed Boiler MACT rule, two solid fuel boilers, and one natural gas boiler. We are concerned that the proposed Boiler MACT rule is far more restrictive than needed to protect the environment. We believe EPA has significant discretion with the MACT program to use various approaches to allow flexibility for the regulated community while still protecting public health and the environment and avoiding the unnecessary burdens and associated costs the proposed rule could pose.

At Luke, we invested over \$32 million to install a baghouse for our boilers to ensure compliance with the previous Boiler MACT rule. We find it very disturbing that our new state-of-the-art baghouse does not comply with the proposed particulate matter emission limit. We are still in the process of conducting an engineering review to determine what enhancements are needed to improve the performance of the baghouse so it can meet the proposed particulate matter limits.

We are also evaluating costs for compliance with the other Boiler MACT proposed limits. In addition to the \$32 million we already spent, our preliminary information indicates that Luke will need to invest another \$14 and a half million to ensure compliance with proposed Boiler MACT limits. These costs are very significant for my mill and will put us at a disadvantage not have to comply with these requirements. I am concerned that these additional costs will impact our ability to compete successfully in a global marketplace.

If EPA provides more flexible approaches for compliance alternatives in the rule, public health and the environment will still be protected without unnecessary costs. I would like to suggest for EPA's consideration the following options to address areas of concern while minimizing regulatory compliance costs. EPA should utilize Clean Air Act Section 112(d)(4) to establish health-based emission limitations to protect the environment and public health. This will avoid the use of unnecessary controls when emissions of pollutants are low enough to be safe. The use of health-based emission limitations will be no more stringent or less stringent than needed and will also

target environmental investments where there is a real need.

EPA should include total select metals limit as an alternative compliance approached for the proposed particulate matter standard. EPA should include further subcategorization to address small or limited use units. The EPA should maintain the work practice standard for natural gas units.

I would like to conclude with a process recommendation for EPA. As a facility manager, it is very difficult for me to determine what my requirements, obligations and potential costs would be for Boiler MACT when EPA has yet to determine what is a "fuel" and what is a "waste." Please finalize the definition of non-hazardous solid waste first, then stabilize the data set and boiler and floor determinations with "boiler" units, request more information to fill data gaps and then come back to the reasonable Boiler MACT proposal. Please also ask the courts for as much time is needed to finalize a rule that is reasonable, meets the intended objectives and is well thought through.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 90

Comment: A new Agency, the Las Brisas Energy Center is proposing to build a toxic waste incinerator in downtown Corpus Christi to burn petroleum coke.

TCEQ, Texas Commission on Environmental Quality, will consider are the air permit, permit number 85- -- is it 85013 -- at its June 30th meeting in Austin next week at the Las Brisas Energy Center application -- air permit application, and we intend to attend that meeting.

I should tell you that in Oasis County, San Patricio County, and Nueces County medical societies have all come out against Las Brisas. I believe that it's going to be harmful to the community's health, already concerned by the absorbently high asthma rates

in Corpus Christi and surrounding areas and birth defects in the area, as well. They're especially concerned about current emissions already -- very high emissions of SO₂ in the communality, particulate matter, as well, and very high rates of emissions coming from this new proposed plant.

There are 28,000 schoolchildren who will live -- who will go to school within five miles of this proposed plant. Currently, the Las Brisas Energy Center is claim/arguing that the MACT analysis is not needed because petroleum coke is not defined such as energy or as a waste product. We would ask that -- that some clarification be provided for that.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 101

Comment: I'd like to thank the EPA today for taking this step to control toxic air pollution from chemical plants, refineries, paper mills and other industrial sources. These new rules, ten years overdue, will finally address mercury and other toxics from over 13,000 large industrial boilers; utilities, petroleum, chemical, paper and plastic industrial facilities nationwide.

These industrial boilers emit about 16,000 pounds of mercury annually. The second largest source of man-made mercury air emissions. In water bodies, this mercury can transform into methylmercury, a potent neurotoxin that bio accumulates and completes to human exposure through fish consumption. Mercury is associated with impaired brain development in children. As outlined in an EPA report from November of 2009, concentrations of toxic chemicals in fish tissue from lakes and reservoirs have been found in nearly all 50 U.S. states. As reported in the 2008 biannual National Listing of Fish Advisory, the presence of these toxic compounds in fish tissue have led to fish consumption advisories, and 43 percent of our nations's

lakes, meaning that pregnant women and other sensitive populations should be especially careful to limit their intake of certain fish species.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Troy Runge

Commenter Affiliation: Wisconsin Bioenergy Initiative

Document Control Number: EPA-HQ-OAR-2006-0790-1054.1

Comment Excerpt Number: 1

Comment: The proposed rule will have a significant impact on the EPA-estimated 400 biomass-burning boilers in the nation. Many of the biomass-fueled boilers in compliance with the original 2004 rule will not be in compliance with the new rule's more stringent emission limits. The hydrogen chloride (HCl) limit will require many biomass fuel boilers to install scrubbers or inject an alkaline sorbent such as lime. The mercury (Hg) limit would require many boilers to install powdered-activated-carbon-sorbent injection systems, although sufficient data does not exist to know whether activated carbon injection is capable of reducing mercury emissions to the levels required by the new rule. The Carbon Monoxide (CO) and dioxin/furan limits will pose additional challenges for most biomass boiler projects as little emissions testing has been conducted to understand the magnitude of these emissions or how best to control them. Therefore, the stringent emission limits may force new biomass fuel boiler projects either to significantly upgrade their existing pollution-control equipment or consider switching to natural gas. Ultimately, this additional hurdle for the use of biomass will increase the use of fossil fuels, which is counterproductive to President Obama's energy policy and Wisconsin's investment in bioenergy.

In summary, we believe the proposed EPA Boiler MACT rule has the following negative unintended consequences:

The rule may severely limit and/or potentially eliminate the use of agricultural biomass fuels, threatening the development of a new local, renewable energy market.

The rule may increase either the facility costs and/or agricultural biomass fuel costs (e.g. fuel may have to be processed to remove minerals) so significantly that these homegrown fuels could not compete with imported fossil fuels like coal or natural gas.

Without agricultural biomass fuels, additional pressure would be put on wood resources (as a substitute for coal), potentially increasing the cost of woody fuels and distorting existing forest products markets, thereby threatening sustainability of harvesting.

Even for woody biomass fuels, there is not sufficient data to know whether control technologies exist that are capable of reducing mercury emissions to the level required by the new rule.

One of the goals of the state of Wisconsin and the U.S. is to help build a local energy economy by using both woody and agricultural fuels (e.g. densified prairie grasses, corn stover, etc.). In order to jump-start these businesses, the state of Wisconsin is sponsoring a new biomass boiler

planned for the Charter Street Heating Plant. This boiler is just one of several projects planned for the state to generate heat and power from biomass. These projects are critical to the goal of achieving 25% of Wisconsin's energy from renewable resources by the year 2025. However, the proposed MACT standards for new biomass boilers are extremely stringent and will severely limit – if not eliminate – the ability to burn many of the biomass fuels envisioned to be developed with these projects. To understand why the Boiler MACT could create this unintended consequence a few examples of issues created are described.

Example 1) Hydrochloric acid (HCl) emissions under the Boiler MACT would require emissions to be below 0.008 lbs/MMBtu. Whereas this is achievable for wood chips or wood pellets, agricultural fuels are expected to have issues as these materials have naturally higher chlorine levels with levels that can be as high as 0.50 lbs/MMBtu for incoming material. To insure emissions are low enough for compliance the boiler will be required to remove 98.4% of the HCl produced which will be challenging without capital intensive scrubbing equipment. This will undoubtedly lead to the use of more woody fuels which have lower HCl or the replacement of biomass for fossil fuels. Woody resources are currently available in Wisconsin but purposely grown bioenergy crops and agricultural residues will be required to meet long term energy independence goals.

Example 2) Mercury (Hg) emissions from some biomass are also envisioned to be problematic, with the MACT rules for a new biomass boiler requiring emissions to be below 0.0000002 lbs/MMBtu. Whereas this is not problematic for typical biomass, woody fuels in regions polluted with mercury emissions from coal burning plants can have naturally higher mercury levels up to 10 times higher than typical biomass with incoming Hg that could be as high as 0.000012 lbs/MMBtu. To achieve the MACT emission limit 98.3% of the incoming mercury would need to be removed which may be difficult to achieve with activated carbon technology scrubbing technology due to the dilute amounts already present. The proposed MACT rule may disallow whole regions from developing new businesses in renewable biomass energy and encourage the continued use of coal fired boilers which have limits 10 times greater than biomass boilers. Rather than set a national MACT standard for biomass, we suggest that the EPA consider the following changes:

First, delay adoption of the standard for biomass until EPA has more data. The data used in setting emission limits is largely limited to one fuelstock—wood. Extremely little data is available on agricultural fuels. We need more time to learn which agricultural fuels can be grown, harvested, densified and stored, as well as the chemical interactions of biomass fuels when combusted.

Second, revise the standards for biomass. We believe new standards based on fuel type, type of boiler and type of use need to be expanded. Consider woody biomass vs. agricultural biomass, geographical variance in mercury and HCl content (some areas of the country grow wood and agricultural fuels that contain lower levels of these pollutants), and whether any control technology would reduce emissions to the new limits.

Third, EPA should set more reasonable limits that reflect the variability of operations. Boilers go through many process upsets including start-ups, shutdowns, and fuel mix changes. When the EPA relies on HAP test data from a short period of time, it is missing this inherent variability that occurs even at well-operated boilers, but is regulating boilers at those levels.

Finally, EPA should not penalize emerging biomass fuels. Several of the existing and new source limits for biomass are extremely low because the baseline of emissions is very low compared to other fuels. Emissions of mercury, dioxin and hydrochloric acid are present in very small

amounts in wood and are minor sources of these HAPs, yet the costs to achieve these very low levels becomes exponentially more expensive and essential only serves to eliminate the use of these fuels.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: John M. Cullen

Commenter Affiliation: Masco Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-1471.1

Comment Excerpt Number: 1

Comment: As proposed, the Major Source Boiler MACT will impact both the natural gas and biomass fueled boilers at Masco operations. As proposed, the natural gas fired units must comply with work practice standards that include tune-ups and energy assessments while the biomass-fueled units will be subject to pollutant emission limitations and work practice standards. Some facilities already have particulate (PM) and carbon monoxide (CO) limits for their boilers, while the mercury, hydrochloric acid and dioxin/furan limitations will be new to most, if not all, facilities. We consider the limit levels being proposed as stringent and they may be difficult to comply with using existing required control technology. Considering the potential impact of these regulations on the company's operations, Masco submits the following comments addressing aspects of the solid waste definition and the Major Source Boiler MACT rules:

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Jim Hickman

Commenter Affiliation: Langdale Forest Product Company

Document Control Number: EPA-HQ-OAR-2006-0790-1379.1

Comment Excerpt Number: 2

Comment: The limits are so unreasonable that the impact analysis in the rule assumes that no new biomass boilers will ever be built at major sources. This is absurd given the fact that biomass is greenhouse gas-neutral and the government is pushing increased use of renewable energy.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: John M. Cullen
Commenter Affiliation: Masco Corporation
Document Control Number: EPA-HQ-OAR-2006-0790-1471.1
Comment Excerpt Number: 3

Comment: It is appropriate that work practices be instituted for natural gas boilers and process heaters in lieu of emission limitations, and will help encourage the use of this low-HAP containing fuel.

Emission averaging is an important compliance tool and EPA should continue to include this opportunity in the rule. It should not, however, contain a 10% discount factor, which causes it to lose its intended flexibility.

The proposed work practice requirement for natural gas-fired boilers and process heaters in §63.7540(a)(10)(vi)(C) would require a source to include in the on-site annual report the "type and amount of fuel used over the 12 months to the annual adjustment". In order to comply with this requirement, the facility would have to install individual gas meters on the unit. Most facilities do not presently have such meters on individual units, and installing them would be unnecessarily burdensome.

A boiler or process heater that has not operated in the previous year should be allowed to skip the annual tune-up requirements.

EPA should allow existing energy management plans and assessments at affected companies to act as a substitute for the energy assessment requirements proposed.

Initial notification requirements in 63.7545(b) for existing boilers and process heaters is not appropriate for natural gas-fired boilers and should be clarified to exclude boilers that do not have emission limits.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Cheryl Johncox
Commenter Affiliation: Minneapolis Neighbors for Clean Air
Document Control Number: EPA-HQ-OAR-2006-0790-1971
Comment Excerpt Number: 2

Comment: Biomass boilers tend to operate at lower efficiencies than fossil fuel boilers. Therefore, although the proposed major source MACT thresholds for PM are the same for

biomass and coal on a heat input basis (0.02 lb/ MMBtu), actual PM emissions from biomass boilers per unit useful energy generated will be higher than from coal. For existing units, the emission limits for HCl, Hg, CO and dioxins/furans are higher for biomass than for coal or liquid fuels. For new units, biomass PM emission limits are higher than for coal. Since biomass is being promoted as “clean and green” energy, we think EPA should require biomass emissions to at least be as clean as those from coal, but further that EPA should consider “beyond the floor” requirements for biomass emissions. This is particularly the case for plants that are using secondary materials, such as sorted construction and demolition debris, as fuel. Metals emissions from this fuel stream, even after sorting, can be significant.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Cheryl Johncox

Commenter Affiliation: Minneapolis Neighbors for Clean Air

Document Control Number: EPA-HQ-OAR-2006-0790-1971

Comment Excerpt Number: 5

Comment: It is also troubling that the biomass MACT limits for dioxins/furans exceed those from coal by an order of magnitude. In incinerators, the amount of dioxin formed by burning seems to depend largely on the chlorine content in the waste that is burned. [P Lois Marie Gibbs. (1995). Dying From Dioxin. Pg 49-50. Boston, Massachusetts: Citizens Clearinghouse for Hazardous Waste.]

Similarly, burning wood releases dioxins, [United States Department of Health and Human Services. (May, 2010). Questions and Answers about Dioxins. Retrieved from <http://www.fda.gov/Food/FoodSafety/FoodContaminantsAdulteration/ChemicalContaminants/DioxinsPCBs/ucm077524.htm>] particularly when combustion occurs in the presence of chlorine, [Environmental Protection Agency. (1997). NATIONAL EMISSION STANDARDS TO CONTROL HAZARDOUS AIR POLLUTANTS EMITTED FROM PULP AND PAPER MILLS. Pg. 3. Retrieved from http://www.epa.gov/ttncaaa1/t3/fact_sheets/pandpfs.pdf] as is created by combustion of even small amounts of plastic that can co-occur with waste wood. Burning lumber treated with pentachlorophenol, which the lumber industry uses to preserve wood, also creates dioxin. [United States Department of Agriculture. (2005). Monitoring Dioxin. Retrieved from <http://www.ars.usda.gov/is/ar/archive/jan01/dioxin0101.htm>.] This fact demonstrates that the burning of wood in incinerators, even when the wood is not processed by the paper and pulp industries, can result in the creation of dioxin. The biomass industry is and will continue to be a significant source of dioxin emissions. EPA should consider “beyond the floor” controls to ensure that emissions of dioxins/furans from biomass are controlled at least as well as emissions from coal.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Bill Thomas

Commenter Affiliation: Shuqualak Lumber Company

Document Control Number: EPA-HQ-OAR-2006-0790-1948.1

Comment Excerpt Number: 4

Comment: We are concerned that many of the boilers used to set the MACT floor for existing units may be units that were "new" or already-modified existing units that were affected by the now-vacated Boiler MACT. Our concern is that these boilers likely installed control equipment to meet the previous Boiler MACT, and thus would produce much lower emissions in the 2008 survey than would otherwise have been produced. The vacature of the Boiler MACT should not have been allowed to skew the results of the industry survey to facilitate even more stringent standards now.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Edward J. Wilusz

Commenter Affiliation: Wisconsin Paper Council

Document Control Number: EPA-HQ-OAR-2006-0790-2133

Comment Excerpt Number: 6

Comment: EPA inappropriately relies on emissions data from the "best of the best" in determining the existing source MACT floors.

This problem is further exacerbated by the fact that the bulk of the information on which EPA's relied in developing the proposed standards was collected by way of a § 114 information request that required testing of specified units for specified pollutants. The record reveals that EPA intentionally directed the information request to units that it had reason to believe were the better performing units in each subcategory.

During the Phase I Industrial Boiler MACT data collection effort, EPA requested and received emissions data from most of the potentially affected sources across all of the subcategories for PM, CO, NO_x and many HAPs. After sifting the Phase I data, EPA developed a Phase II plan for collecting additional data. During this second round, however, EPA targeted only those sources whose data EPA determined it would need to set the MACT floor. In this way, EPA artificially limited the pool of data from which it drew its top 12% best performing sources. The result is fatally arbitrary because EPA's sampling approach for Phase II created a dataset that is not representative of sources for which the data is being used to infer emissions.

Instead of using emissions data from the “best of the best,” EPA should simply use emissions data from the “best” units in each subcategory. In other words, EPA should determine how many units constitute the top 12% in each subcategory (or top 5 in subcategories with fewer than 30 sources) and then use emissions data from this number of units (or as many of these units for which emissions data are available) in determining the MACT floor and MACT standard. This approach is warranted because the Phase I ICR data allowed EPA to reliably select the top performers in each subcategory for purposes of collecting the Phase II information. As a result, EPA has sufficient “emissions information” for each subcategory to reasonably select the top performers on which the MACT floor and MACT standard should be based.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: John Huber

Commenter Affiliation: National Oilheat Research Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1831.1

Comment Excerpt Number: 14

Comment: 3. EPA inappropriately relies on emissions data from the “best of the best” in determining the existing source MACT floors. In one fashion or another, EPA has been working on the Industrial Boiler MACT standards for better than 15 years and the need to set these standards was established by the 1990 Clean Air Act. Despite this long run-up to the proposed rule, the Agency has shockingly little data available to set the existing source standards. Tables 2 and 3 in the preamble tell the tale.

While it is true that the statute allows EPA to determine the MACT floor based on sources “for which the Administrator has emissions information,” this provision does not excuse EPA from using its resources and legal authority to obtain as much information as it reasonably can prior to setting MACT standards. In this case, EPA has had 15 to 20 years to gather the needed information. The fact that, at this point, data on only a small subset of sources in each subcategory is available should not provide EPA with enough information to move forward as it has done here in regulating very small sources.

This problem is further exacerbated by the fact that the bulk of the information on which EPA’s relied in developing the proposed standards was collected by way of a § 114 information request that required testing of specified units for specified pollutants. The record reveals that EPA intentionally directed the information request to units that it had reason to believe were the better performing units in each subcategory.

During the Phase I Industrial Boiler MACT data collection effort, EPA requested and received emissions data from most of the potentially affected sources across all of the subcategories for PM, CO, NO_x and many HAPs. After sifting the Phase I data, EPA developed a Phase II plan for collecting additional data. During this second round, however, EPA targeted only those sources whose data EPA determined it would need to set the MACT floor. In this way, EPA artificially limited the pool of data from which it drew its top 12% best performing sources. The result is

fatally arbitrary because EPA's sampling approach for Phase II created a dataset that is not representative of sources for which the data is being used to infer emissions. Instead of using emissions data from the "best of the best," EPA should simply use emissions data from the "best" units in each subcategory. In other words, EPA should determine how many units constitute the top 12% in each subcategory (or top 5 in subcategories with fewer than 30 sources) and then use emissions data from this number of units (or as many of these units for which emissions data are available) in determining the MACT floor and MACT standard. This approach is warranted because the Phase I ICR data allowed EPA to reliably select the top performers in each subcategory for purposes of collecting the Phase II information. As a result, EPA has sufficient "emissions information" for each subcategory to reasonably select the top performers on which the MACT floor and MACT standard should be based. However, since an insufficient number of boilers were tested in the small and medium size category, there is no basis for establishing a MACT standard for these boilers.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: R. Wade Mosby

Commenter Affiliation: The Collins Companies

Document Control Number: EPA-HQ-OAR-2006-0790-1461.1

Comment Excerpt Number: 3

Comment: The dioxin limits for new units are more than 100 times more stringent than the recently promulgated medical waste incinerator rules. And by EPA's own admission, those rules are so stringent that every existing medical waste incinerator in the country will close because they will not be able to comply. An early review sent to us by the American Forest and Paper Association indicates that the limits are un-achievable and that no existing wood fired biomass facility in the data base will meet all the proposed limits with existing controls.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Robert H. Colby and G. Vinson Hellwig

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2022.1

Comment Excerpt Number: 29

Comment: Emission averaging within a source can be an effective means of reducing compliance costs to the source without adversely impacting public health. NACAA generally supports the concept of emission averaging as set out in the proposal provided: (1) there is clear

authority to do so under section 112 and (2) the benefits of averaging are fairly apportioned between the regulated community and the public. While emission averaging is helpful to sources on the margin, it should not be adopted if it will cause significant risk that the final rule will be overturned. Where a source is able to achieve more cost-effective emission reductions at one unit, emission averaging offers a “win-win” opportunity that should be embraced without penalty to the source. However, at times, compliance costs are reduced, at least in part, because sources are able to emit more of the regulated pollutant than without emission averaging because they can operate with smaller compliance margins. EPA has solicited comment on whether a 10-percent reduction in the overall emission limit would be appropriate if averaging were allowed, but has offered no estimate on how much of an emissions increase would result from averaging.

If the units at issue indeed have the 300-percent to 1000-percent variability that EPA’s MACT floor analysis suggests, a 10-percent penalty would seem to allow a fairly significant increase in overall emissions at the source. The increase in emissions could be evaluated by calculating how much the variability is decreased⁶² when paired compliance demonstrations are to be made. It may be that this issue can also be addressed by appropriate corrections to the MACT variability analysis and compliance demonstration provisions.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners, CIBO

Document Control Number: EPA-HQ-OAR-2006-0790-1783.1

Comment Excerpt Number: 64

Comment: In the Proposed Boiler MACT Rule, EPA is considering a provision for emissions averaging with respect to the proposed emissions limitations for industrial, commercial and institutional boilers and process heaters. 75 FR 32034. Use of emissions averaging would allow owners and operators of an affected source to demonstrate that the source complies with the proposed emission limits by averaging the emissions from an individual affected unit that is emitting above the proposed emission limits with other affected units at the same facility that are emitting below the proposed emission limits. Id. EPA further acknowledges that "emissions averaging represents an equivalent, more flexible and less costly alternative to controlling certain emission points to MACT levels" and its application "would not lessen the stringency of the MACT floor limits and would provide flexibility in compliance, cost and energy savings to owners and operators." Id.

In the Proposed Boiler MACT Rule, EPA has proposed that owners and operators of existing – but not new – affected sources be permitted to demonstrate compliance with the proposed emissions limitations by emissions averaging for units at the affected source that are within a single subcategory. Id. Under this proposal, emissions averaging could only be used between boilers and process heaters in the same subcategory at a particular affected source. Id.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners, CIBO

Document Control Number: EPA-HQ-OAR-2006-0790-1783.1

Comment Excerpt Number: 65

Comment: As proposed in the Boiler Rule, emission averaging is explained as allowing averaging only within a subcategory (75 FR 32024) although it is not clear from the proposed rule language if this is what EPA intended. See § 63.7522(a), 75 FR 32053. See also 75 FR 32055, Equation 6. EPA provides no justification for restricting averaging to a given subcategory nor is it rational to impose such a restriction.

Some affected units involve multiple boilers operating in different subcategories (e.g., coal and biomass). These boilers are generally located in separate powerhouses. The goal of emissions averaging is to allow facilities to over-control some emissions points while under-controlling others, thus achieving the required reductions in the most cost-effective manner possible. This could be best achieved by EPA removing the restriction (or clarifying its intent) to permit averaging for all affected units, regardless of whether the boilers emit through separate or "common stacks." The rule should allow for averaging across all units regardless of category of pollutants to be averaged so long as emissions from a single unit can be quantified with testing either in the breeching or in the stack when other units aren't operating.

Allowing averaging across subcategories within the rule is consistent with the four averaging criteria EPA described in the Proposed Boiler MACT Rule preamble:

- (1) No averaging between different types of pollutants,
- (2) No averaging between sources that are not part of the same affected source,
- (3) No averaging between individual sources within a single major source if the individual sources are not subject to the same NESHAP, and
- (4) No averaging between existing sources and new sources.

75 FR 32035. These criteria for emissions averaging could be adapted to the Proposed Rule as well.

Emissions averaging generally allows a facility to avoid otherwise cost-prohibitive compliance options by over-controlling some other emission unit in a more cost-effective combination. It also has corresponding environmental benefits, by creating an incentive to burn more natural gas or renewable fuels such as biomass as a strategy to average out emissions from a coal-fired unit. As EPA explained in the Boiler Rule, emissions averaging does not result in any higher total HAP emissions than those permitted under the Rule, and therefore there is no additional risk to human health or the environment.

The legal precursor to introducing emissions averaging is *Chevron U.S.A., Inc. v. NRDC*, 467 U.S. 837 (1984). In *Chevron*, the Supreme Court held that EPA regulations allowing states to treat all of the pollution-emitting devices within the same industrial grouping as though they were encased within a single "bubble" were based on a reasonable construction by EPA. This case opened the door to more specific emissions averaging efforts, such as those implemented in the Hazardous Organic NESHAP, 59 FR 19425 (April 22, 1994) (HON Rule). Several rules have followed the HON Rule in authorizing emissions averaging, and the DC Circuit has never invalidated the approach. The proposed emissions averaging provisions in the Boiler Rule are directly based on the emissions averaging provisions in the HON.

In the HON Rule, EPA thoroughly examined the legal basis for emissions averaging, and explored the degree of averaging permitted under § 112(d) of the CAA. At the end of its review, EPA concluded that the CAA "does not define source category, nor does it impose precise limits on the Administrator's discretion to define source." *Id.* EPA further acknowledged that the CAA does not limit how standards are to be set for a category or subcategory beyond requiring that it be applicable to all sources in a category, be written as a numerical limit wherever feasible, and be at least as stringent as the floor. *Id.*

In promulgating the HON emissions averaging rules, on which the Proposed Boiler MACT Rule relies, EPA thus concluded that "the relevant statutory language is broad enough to permit the Administrator to allow sources to meet the MACT through the use of emissions averaging provided the standard applies to every source in the category, averaging does not cross source boundaries, and the standard is no less stringent than the floor." *Id.* Allowing emissions averaging across subcategories within the Proposed Boiler MACT Rule is consistent with the parameters established in the HON rule, and reiterated in the Proposed Boiler MACT Rule preamble. See 75 FR at 32035. Namely, allowing averaging across subcategories will not result in averaging between (a) different types of pollutants, (b) sources that are not part of the same affected source, (c) individual sources within a single major source if the individual sources are not subject to the same NESHAP, and (d) existing sources and new sources. *Id.*

There is precedent in MACT standards for allowing averaging across different types of units of a single source. For example, the HON Rule allows process vents, storage vessels, transfer racks, and wastewater streams to all be included in an emission average across an affected source. 40 CFR Subpart G. EPA reasoned that averaging needed to be allowed across all emission points (except equipment leaks) in order to provide as much flexibility as possible while maintaining an enforceable emission limitation. 59 Fed. Reg. 19,425. Similar mechanisms have been adopted in other MACT standards. See, e.g. Petroleum Refinery NESHAP, 60 FR 43244, 43254 (Aug. 18, 1995) (allowing wide range of emission sources to be averaged, noting that "EPA has the flexibility to allow trading within a facility that includes units in different source categories"); Boat Manufacturing NESHAP, 66 FR. 44218, 44232 (Aug. 22, 2001).

As in the HON, the compliance methodology can easily accommodate subcategories with different emission limits for a given pollutant. This is done basically by calculating a weighted average allowable mass emission and a weighted average actual mass emission each month using heat inputs or steam production for each unit.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners, CIBO

Document Control Number: EPA-HQ-OAR-2006-0790-1783.1

Comment Excerpt Number: 66

Comment: In the Proposed Boiler MACT Rule, EPA proposed a restriction on emissions averaging that requires facilities using that option to meet a standard that is 10% stricter than the otherwise applicable limits. 75 FR 32035. EPA should not include this 10% penalty for using emissions averaging because it is arbitrary, unnecessary for environmental protection and reduces the flexibility that averaging provides. In the Proposed Boiler MACT Rule, EPA asserts that its inclusion further ensures the allowable emissions are at least as stringent as the MACT floor limits without using averaging. However, EPA offers no demonstration of this in the proposal. Given the accuracy of heat input weighted emission calculations, there is no uncertainty that the average emission rates will be any less stringent than when not using averaging. Because EPA has already determined that the standards in the rule achieve the maximum emission reduction achievable for health and environmental protection, to require an additional 10% reduction of emissions has no basis in the environmental underpinnings of the rule. Because emissions averaging is a compliance alternative, the 10% discount factor would constitute a beyond-the-floor requirement. Although the 10% discount may be perceived as a fair trade-off for the flexibility of emissions averaging, it still lacks a legal basis and creates a disincentive for sources to use this compliance method. Where, as here, proposed emission limits are very tight, sources will not be able to ensure an additional 10% reduction in emissions below the limits and imposing this penalty effectively would deprive many sources of the availability of the emissions averaging compliance alternative.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Douglas J. Fulle

Commenter Affiliation: Oglethorpe Power Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-1798.1

Comment Excerpt Number: 1

Comment: Oglethorpe Power Corporation has a particular interest in the proposed standards for biomass-fired boilers because we are currently developing a new 100 MW biomass-fired power plant, which will be located in Warren County, Georgia. This will be a state-of-the-art bubbling fluidized bed unit with advanced air pollution controls for all regulated pollutants. The facility

will not be a major source of hazardous air pollutants ("HAPs"). Because construction on the plant is not scheduled to begin until 2012, the boiler will be subject to the new source standards in the Area Source Rule.

We are gravely concerned with the proposed Area Source Rule -particularly with regard to the proposed carbon monoxide ("CO") standard for new biomass-fired boilers. The fact that we are still in the design stage of our Warren County biomass boiler normally should be expected to be advantageous to us given that we should be able to design our boiler with the Area Source Rule in mind. However, our vendors have informed us that they will not be able to guarantee that the new boiler would be able to meet the proposed CO standard at all times. They are especially concerned about being able to comply with the limit during startup due to the fact that startup is expected to take about 18 hours and that combustion conditions cannot be precisely controlled as the unit is coming on line.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Lisa Beal

Commenter Affiliation: Interstate Natural Gas Association of America

Document Control Number: EPA-HQ-OAR-2006-0790-1919.1

Comment Excerpt Number: 2

Comment: For major sources, INGAA supports work practices rather than emission limits for natural gas-fired units.

For the major source rule, natural gas-fired units are included in the "Gas 1" subcategory, and work practice standards are required rather than emission standards for this subcategory. INGAA supports the use of work practices for natural gas-fired units located at a major source. In proposing work practices for natural gas-fired units under CAA §112(h)(2), EPA solicits comments on the practicality of emissions measurement. INGAA agrees with the conclusion that §112(h)(2)(B) applies, because measurement of trace HAP species that may be present in natural gas combustion exhaust is technically and economically impractical.

Section 112(h)(1) allows the Administrator to promulgate work practices rather than emission standards, "...if it is not feasible in the judgment of the Administrator to prescribe or enforce an emission standard...". Section 112(h)(2)(B) defines infeasibility as a situation where the Administrator determines:

"(B) the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations."

As noted in the preamble, cost and methodology issues broadly apply for smaller units and INGAA agrees that work practices are appropriate for units smaller than 10 MMBtu/hr. In

addition, for natural gas-fired units 10 MMBtu/hr and larger, EPA also concluded that work practices are appropriate under §112(h). INGAA supports this conclusion. Natural gas combustion exhaust either contains no HAP or, at most, very trace levels. If no HAPs are present, measurement is useless because no emissions will be measured. If trace HAPs are present, measurement is both technically and economically impractical. Measurement is technically impractical because it is beyond the capability of existing methods. Measurement is economically impractical because it will entail exorbitant costs due to the inordinate sample time required to attempt to achieve reasonable detection limits for the clean combustion exhaust from natural gas-fired units.

As noted in the following comment, while INGAA supports work practice standards, INGAA also recommends additional flexibility so that required work practices are practical.

Work practices should be more flexible to avoid impractical requirements, and CO measurement should not be required for small natural gas-fired boilers.

The proposed rule itemizes work practice requirements for Gas 1 units 10 MMBtu/hr or larger in §63.7540(a)(10)(i) – (vi). In addition, §63.7540(a)(11) references those requirements for boilers and heaters smaller than 10 MMBtu/hr. As noted in Comment 2, INGAA supports work practice standards for natural gas-fired units. However, additional flexibility and clarity is required to ensure that the work practices can be implemented. For example, “manufacturer recommendations” are cited in several cases, and those procedures may not be available for some existing units (e.g., older or smaller units), or operator experience may provide operating practices that are more concise and preferable to manufacturer recommendations. In addition, the many facilities include very small natural gas-fired boilers or heaters that are covered by the rule. CO measurement is not warranted for small natural gas-fired units and a “blue flame” provides adequate assurance of “good combustion”.

“Good combustion practice” standards should be appropriate for work practices. For example, this includes burner cleaning and tuning so that a clean, blue natural gas flame is evident. By requiring “manufacturer recommendations”, the practices are too limiting and additional flexibility should be provided. As needed, operator practices (in lieu of “manufacturer recommendations”) could be documented in a simple plan. In addition, flexibility should be provided for CO measurement. For example, costly reference method tests are not warranted for boiler tune ups and reasonable test procedures should be acceptable – especially since tuning measures changes in CO emissions before and after adjustments.

Major source facilities often include small gas-fired heaters or boilers (e.g., for water heating), and the majority of “very small” boilers or heaters will be natural gas-fired. CO measurement is not warranted for these small gas-fired units, and a combustion tune-up that follows a subset of the steps in §63.7540(a)(10)(i) – (v) is adequate to ensure good combustion and low emissions. As noted in the text below, INGAA recommends excluding natural gas-fired (or “Gas 1”) units smaller than 10 MMBtu/hr from CO measurement. At a minimum, the rule should include a threshold of 1 MMBtu/hr for CO measurement of gas-fired boilers or heaters.

INGAA recommends the following revisions to sections (i) through (v), with proposed revisions provided here as strikethrough for deleted text and new text bold and underlined:

- “(i) Inspect the burner, and clean or replace burner any components of the burner as necessary;
- (ii) Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern consistent with good combustion practices (e.g., a blue flame for natural gas) or the manufacturer’s specifications;
- (iii) As appropriate, inspect Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly;
- (iv) Minimize total emissions of CO emissions consistent with good combustion practices or the manufacturer’s specifications. CO measurement is not required for natural gas-fired boilers or process heaters smaller than 10 million Btu per hour;
- (v) Measure the concentration in the effluent stream of CO in parts per million, by volume, dry basis (ppmvd), before and after the adjustments are made. Acceptable methods include standardized test methods and procedures using a portable analyzer that follow reasonable calibration and operating practices. CO measurement is not required for natural gas-fired boilers or process heaters smaller than 10 million Btu per hour;

As an alternative to the recommended “CO measurement exclusion” text in §63.7540(a)(10)(iv) and (v), the exclusion could included in §63.7540(a)(11) as follows:

“(11) If your boiler or process heater has a heat input capacity of less than 10 million Btu per hour, you must conduct a tune-up of the boiler or process heater biennially to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (a)(10)(vi) of this section. CO measurement in (iv) and (v) is not required for natural gas-fired boilers or heaters smaller than 10 million Btu per hour.”

Section 63.7525(a) should be revised to clearly indicate that CO CEMS are not required for natural gas-fired units and other units that comply with work practice standards.

Section 63.7525(a) indicates that CO CEMS are required for units with a heat input capacity of 100 MMBtu/hr or larger. A similar statement in the preamble at 75 FR 32015 indicates a CO CEMS is required for any unit 100 MBtu/hr or larger. INGAA’s understanding is that this requirement does not apply to natural gas-fired units that comply with work practice standards rather than emission standards. This should be clarified in the final rule.

When the proposed rule is considered in its entirety, it appears that CO CEMS are not required for natural gas-fired units because these units comply with a work practice standard rather than an emission standard. However, experience indicates that rule implementation can be confusing if rule text is not concise. Thus, INGAA recommends revising §63.7525(a) to provide clear context for CO CEMS applicability.

CO CEMS should not be required for natural gas-fired units or other units with work practice standards per §63.7540(a)(10). To avoid confusion regarding CO CEMS applicability, §63.7525(a) should be revised to clearly indicate that natural gas-fired units do not require CO CEMS. INGAA recommends the following revision, with “new text” shown as bold and underlined:

“(a) If your boiler or process heater has a heat input capacity of 100 MMBtu per hour or greater and is not in either the Gas 1 or Metal Process Furnace subcategory, you must install, operate, and maintain a continuous emission monitoring system (CEMS) for CO and oxygen...”

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Robert H. Colby and G. Vinson Hellwig
Commenter Affiliation: National Association of Clean Air Agencies (NACAA)
Document Control Number: EPA-HQ-OAR-2006-0790-2022.1
Comment Excerpt Number: 3

Comment: While NACAA generally supports EPA’s proposed rules, NACAA does not agree with the proposed adoption of a “designed to combust” test for subcategories rather than use of the actual fuel being combusted. This test is not logically related to emissions of HAPs, is susceptible to gaming by certain sources and may be impossible for other well-controlled sources to meet. NACAA has identified several other areas where it appears that EPA’s approach to establishing a MACT floor is inconsistent or otherwise flawed. Moreover, the reasoning and basis for several key decisions are not well documented. In most of these instances, the application of alternatives does not significantly alter the resulting calculation. However, the lack of a consistent, reasoned basis for EPA’s choices creates a risk that the rule will be overturned and in some instances, the resulting floor calculation will be substantially different if other, equally reasonable, factors are used in developing the final determination.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Lisa Beal
Commenter Affiliation: Interstate Natural Gas Association of America
Document Control Number: EPA-HQ-OAR-2006-0790-1919.1
Comment Excerpt Number: 10

Comment: EPA should clarify that keeping records of daily fuel use and operating hours is not required for natural gas-fired units.

The proposed rule is not clear regarding recordkeeping and reporting requirements for fuel use and operating hours, and preamble text and rule text are not consistent. Fuel use and operating hour recordkeeping and reporting requirements should be clarified.

As noted in the preamble, a reason for reporting daily fuel use is to ensure documentation of the type of fuel being combusted (e.g., solid waste is not combusted). However, for natural gas-fired units in gas transmission systems, natural gas will be the only fuel used and “fuel confirmation” can be achieved via much less onerous means than recording and reporting daily fuel use. For example, fuel type can be confirmed by the responsible company official in the compliance report. In addition, there are provisions in the rule that require notification if a fuel other than natural gas is used in a natural gas-fired unit. Fuel use records should not be required for natural gas-fired units complying with work practice standards, other than the annual work practice “tune up” record required in §63.7540(a)(10)(vi)(C) – i.e., “The type and amount of fuel used over the 12 months prior to the annual adjustment.”

The preamble indicates that fuel use and operating hour records are required for natural gas-fired units. For example, the preamble indicates:

“For all boilers and process heaters, we are proposing that you maintain daily records of fuel use that demonstrate that you have burned no materials that are considered solid waste.”

...

We are proposing that you must keep the following records:

...

(4) Daily hours of operation by each source.” [75 FR 32015]

And,

“We are also requiring that you keep daily records of the total fuel use by each affected source, subject to an emission limit or work practice standard,...” [75 FR 32035]

However, the proposed regulations appear to limit these requirements to specific subcategories – e.g., the requirement for fuel use records applies to units that include emission standards. For example, §63.7550(c) indicates compliance report information requirements and includes the following in (c)(4):

“(4) The total fuel use by each affected source subject to an emission limit,...” [emphasis added]

In addition, §63.7545(f) requires notification for natural gas-fired units that intend to use a different fuel:

“(f) If you operate a natural gas-fired boiler or process heater that is subject to this subpart, and you intend to use a fuel other than natural gas or equivalent to fire the affected unit, you must submit a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in § 63.7575. The notification must include the information specified in paragraphs (f)(1) through (5) of this section.”

Thus, the objective to ensure that only natural gas is used for natural gas-fired units is addressed. Daily fuel use records or operating hour records do not appear to be explicitly required for natural gas-fired units in the rule text, but the rule is not clear.

INGAA recommends that the final rule clearly indicate that fuel use and operating hour recordkeeping and reporting requirements do not apply to natural gas-fired units subject to work

practices other than the work practice requirement for an annual fuel use record. Confusion caused by text cited above should be clarified. The final rule should clearly indicate that §63.7545(f) provides assurance on fuel type for natural gas-fired units and 63.7540(a)(10)(vi)(C) identifies the requirement for annual fuel use records for units subject to work practices. If EPA intends for more onerous requirements (e.g., daily records) for fuel use or operating hours for natural gas-fired units, the basis and associated burden for the requirement should be clearly documented and rationalized.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Robert H. Colby and G. Vinson Hellwig

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2022.1

Comment Excerpt Number: 25

Comment: Within the Boiler MACT “coal-fired” category, EPA proposes separate subcategories for stoker, fluidized bed and pulverized coal designs. However, we know of no reason why well-controlled units of these designs should differ significantly in levels of HAP emissions. EPA’s subsequent MACT floor analysis leads to calculated MACT floor levels that are often identical and are within the variability expected of such measurements, thus documenting the lack of a basis for a separate subcategory. Similarly, EPA proposes to establish four subcategories of wood-fired boilers⁵⁷ – stoker, fluidized bed, suspension and “fuel cell” – as well as separate subcategories for natural gas and other process gases. Again, EPA provides no demonstration that such subcategories are warranted.

The “fuel cell” subcategory of wood-fired boilers is especially problematic. A fuel cell is generally understood to create electricity directly from a fuel gas without combustion.⁵⁸ As such, a true fuel cell would not be subject to the ICI Boiler Rule. One does not find in the technical literature a discussion of “fuel cell” combustion units. A visit to the website of one of the manufacturers of a unit (Wellon, Inc) that EPA asserts is a wood-fired fuel cell combustion unit reveals that the company does refer to certain of its units as fuel cells, but this reference is to a marketing approach to the sale of modular units, rather than a particular design.⁵⁹ The units in EPA’s database that it styles as “fuel cell” units appear to be newer than most, and for that reason, relatively fuel efficient and low emitting, but there does not appear to be any difference in fundamental design that would warrant establishment of a separate category.

Creating larger numbers of subcategories usually leads to higher MACT floors in two ways. First, if a small number of the best performers (e.g., fuel cells) can be culled from a larger group into their own subcategory, the MACT floor for the larger group (the wood-fired boilers) will rise. Second, because the small group will have a small number of tests, the statistical variability of the small group will also increase, leading to MACT floor increases for both the larger group and the smaller group.⁶⁰

NACAA agrees that fluidized bed combustion units (either biomass or coal-fired) are of sufficiently different design and anticipated performance that a separate subcategory may be warranted, but does not see a justification for the other subcategories proposed by EPA for the Boiler MACT rule.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Robert H. Colby and G. Vinson Hellwig

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2022.1

Comment Excerpt Number: 35

Comment: EPA has solicited comment on whether the agency should adopt “risk-based” exemptions for manganese and HCl. Section 112(d)(4) of the CAA provides:

With respect to pollutants for which a health threshold has been established, the Administrator may consider such threshold level, with an ample margin of safety, when establishing emission standards under this subsection.

After careful review, NACAA has concluded that these exemptions are not authorized by the CAA and are not in the public interest. The factual predicate for the use of section 112(d)(4) for acid gas HAP and metal HAPs – the establishment of a health threshold for each of these pollutants – has not been met. Congress authorized risk-based standards only “where health thresholds are well-established...and the pollutant presents no risk of other health effects, including cancer, for which no threshold can be established...” [Footnote: S. Rep. No. 228, 101st Cong. 1st Session, (December 20, 1989), reprinted in A Legislative History of the Clean Air Act Amendments of 1990 (Comm. Print 1993), at 8511.]

Many of the HAPs for which HCl and PM are surrogates are potential or demonstrated carcinogens. Moreover, because no meaningful studies have been conducted, EPA has identified both HCl and manganese as unclassifiable for carcinogenicity. For this reason it cannot be asserted that a “well-established” threshold exists and that there is no risk of cancer. EPA’s Integrated Risk Information System (IRIS) reports that no studies have identified a No Observable Effects Level (NOEL) for neurological effects for manganese. [Footnote: See, <http://www.epa.gov/iris/subst/0373.htm>; <http://www.epa.gov/ncea/iris/subst/0396.htm>.] Further, the CAA requires that a section 112(d)(4) standard include “an ample margin of safety.” EPA’s IRIS report concludes that the scientific confidence in the Oral Reference Concentration for HCl employed by EPA in the ICI Boiler “risk-based exemption” is “low.” [Footnote: The IRIS report concludes “[t]he chronic study used only one dose and limited toxicological measurements. The supporting data consist of two subchronic bioassays; the database does not provide any additional chronic or reproductive studies. Therefore, low confidence was

recommended for the study, database, and the RfC”.] For this reason, it cannot be said that the “well established” threshold that provides an “ample margin of safety” has been established for HCl. Broader approaches for alternate emission standards were specifically rejected by Congress in the development of section 112. [Footnote: Congress specifically rejected an amendment that would have provided that individual sources “could comply with alternative emission limitations in lieu of standards under this section, if the owner or operator presents evidence sufficient to demonstrate that emissions from the source in compliance with such limitations present a negligible risk to public health under criteria issued by the Administrator.” 2 Legislative History, at 3939. The Act itself provides a specific alternative emission standard for coke oven batteries. Thus, a risk-based exemption for specific sources is contrary to the statutory structure and would not be approved under a de minimis test, even if the emissions impacts were trivial. EPA’s history over the past 40 years in attempting to develop a risk-based approach to regulations of toxic air emissions, and in particular the development of residual risk programs under section 112, demonstrate that these issues are far too complex and significant to be delegated to individual sources as EPA intended.]

On August 6, 2010, EPA adopted a NSPS for Portland Cement plants. In its final rule EPA specifically rejected adoption of risk-based exemptions for HCl and manganese, making many of the points identified above and also relying on the benefits associated with the co-removal of SO₂. There are no differences sufficient to warrant a reversal of that decision in this standard. Moreover, EPA has not identified a proposal for an exemption with sufficient specificity to allow for meaningful comment for a final rule. Finally, there is no record sufficient to support such a proposal and insufficient time under the applicable statutory and judicial deadlines to develop such a proposal and rulemaking record.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: William H. Carlson

Commenter Affiliation: Carlson Small Power Consultants

Document Control Number: EPA-HQ-OAR-2006-0790-1493.1

Comment Excerpt Number: 5

Comment: New units do not fare much better, though, except for fluidized bed boilers, the CO limits are identical to those for existing units. Boiler manufacturers can design sophisticated overfire air systems that will minimize CO emissions under normal operation. But this system can be easily defeated by changes in fuel moisture, and will be utterly useless during startups and shutdowns. Again, a catalytic CO unit will be the only option for a manufacturer, as any guarantee offered without a catalytic CO reduction unit can be easily defeated by a fuel moisture or size change, or by a startup. Most new units will be above the 100mm Btu/hr heat input level, thus having only a 24 hour averaging period for CO emissions. This means that a startup, even with a catalytic CO reduction unit, will likely result in a daily violation of CO limits. This further dampens the prospects for future biomass combustion.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: William H. Carlson

Commenter Affiliation: Carlson Small Power Consultants

Document Control Number: EPA-HQ-OAR-2006-0790-1493.1

Comment Excerpt Number: 7

Comment: In the case of new units, the imposition of a standard of 0.008 lb/mmBtu appears to be at least technically feasible, though cost for additional ESP fields is an issue for the future of the industry. However, because ESP's cannot be energized until a certain minimum oxygen level is obtained, for safety reasons, and that oxygen level cannot be obtained without biomass firing, this standard can again be defeated by counting startup emissions.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Bill Wickman and Laurel Brent-Bumb

Commenter Affiliation: Sustainable Forest Action Coalition

Document Control Number: EPA-HQ-OAR-2006-0790-1487.1

Comment Excerpt Number: 5

Comment: It is critical that there is an awareness of the need to maintain and enhance the existing bio-energy infrastructure to provide needed forest and ecosystem treatments to reduce the amount of carbon dioxide released from catastrophic wildfires. Currently, air quality districts within some of our member counties require a maximum limit of 0.03 lb/MMBtu. The new proposed MACT limit is 0.02 lb/MMBtu. Given that the majority of our bio-energy plants are relatively small in mega watt capacity, this minor change can cost between \$1-2 million per plant or a 25-30% reduction in output. SFAC respectfully asks if this change in California is needed given the high risk of losing current infrastructure over this minor change as well as restricting new development.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Joe Fierst

Commenter Affiliation: Wausau Paper

Document Control Number: EPA-HQ-OAR-2006-0790-1488.1

Comment Excerpt Number: 7

Comment: In addition, the Rhinelander stoker boilers have a new bag house (which is the recommended control technology for particulate matter) and emissions results are still over the proposed limit for particulate matter,

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners, CIBO

Document Control Number: EPA-HQ-OAR-2006-0790-1783.1

Comment Excerpt Number: 32

Comment: The proposed definition of the subcategory of "units designed to burn oil." needs to be clarified. In the Proposed Rule, EPA defines the subcategory of "units designed to burn oil." as follows:

Unit designed to burn oil subcategory includes any boiler or process heater that burns any liquid fuel, but less than 10 percent solid fuel on a heat input basis on an annual average, either alone or in combination with gaseous fuels. Gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment, gas supply emergencies or for periodic testing of liquid fuel not to exceed a combined total of 48 hours during any calendar year are not included in this definition. 75 FR 32065.

The proposed definition is unreasonable because, as it is currently phrased, gaseous fuel boilers and process heaters could be limited to only 48 combined total hours during a calendar year before they are included in this subcategory. EPA should clarify the "units designed to burn oil" subcategory to apply only to the time the unit is operated on oil for periodic testing of oil firing capability. EPA should impose no time limit on legitimate gas curtailment or gas supply emergencies. Such a change would be reasonable and better reflect EPA's intent for units that burn liquid as evidenced by the "gas-fired boiler" definition in the Proposed Area Source Rule. 75 FR 31931.

In the Proposed Rule, EPA defines gas-fired boiler as "any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year." 75 FR 31931. Notably, EPA imposes the 48 hour limitation only on the "[p]eriodic testing of liquid fuel" and there is no limit on legitimate gas curtailment or gas supply emergencies. Beyond consistency with the Proposed Area Source Rule, this rectification of the definition would be similar to EPA's approach in the

stationary SI internal combustion engine (ICE) NSPS, where 50 hours are allowed for non-emergency use. See 40 CFR § 60.4243.

Response: .

Commenter Name: Britt S. Fleming

Commenter Affiliation: Auto Goup

Document Control Number: EPA-HQ-OAR-2006-0790-1916.1

Comment Excerpt Number: 3

Comment: WORK PRACTICES FOR NEW AND EXISTING NATURAL GAS BOILERS/PROCESS HEATERS ARE APPROPRIATE IN LIEU OF EMISSION LIMITS BUT REQUIRE ADDITIONAL CLARIFICIATION AND REVISION IN THE FINAL RULE.

The Auto Group supports EPA's proposal to require work practices for all small new and existing boilers and process heaters with a heat input capacity of less than 10 mmBtu/hr in lieu of emission limits given the difficulty in testing units of that size as well as the significant costs associated with testing and monitoring. In addition, the Auto Group supports EPA's proposal for work practices for new and existing larger boilers and process heaters burning natural gas in lieu of emission limits. As EPA notes in the preamble, section 112(h) of the CAA allows EPA to set work practice standards in situations where "it is not feasible in the judgment of the Administrator to prescribe or enforce an emission standard" The definition of "not feasible to prescribe or enforce an emission standard" is defined in the CAA as any situation where "the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations." EPA's explanation of the physical limitations of the boiler and process heater stacks as well as the considerable cost associated with installing the necessary testing platforms and test ports clearly meet the criteria for work practice standards under section 112(h) for these sources. There are other testing challenges and data problems that justify section 112(h) work practices for larger natural gas-fired boilers/process heaters as well as significant policy reasons for why emission limits are not appropriate for these larger sources. These issues are discussed in further detail below.

A. Testing Challenges for Natural Gas-Fired Boilers Over 10 mmBtu/hr Meet the Criteria for Section 112(h) Work Practices.

In addition to smaller natural gas-fired boilers/process heaters, EPA is proposing work practices for natural gas-fired boilers/process heaters with a heat input capacity over 10 mmBtu/hour given that the cost of installing controls to comply with emission limits for the five HAP groups is over \$14 billion.⁹ This number grossly underestimates the cost of add-on controls by excluding the monitoring and operating expenses associated with such equipment. Other industry groups filing comments on this proposal have estimated that the cost of add-on controls for natural gas-fired units in EPA's database alone would be upwards of \$51 billion for the subcategory. In reality, this number is likely even higher given that EPA's database does not include all the natural gas units in the country that would be affected by this rule.

Consistent with the D.C. Circuit's opinion in *Sierra Club v. EPA*¹⁰ on the Brick MACT standard, EPA also requests comment on whether the application of measurement methodology to natural gas-fired boilers and process heaters is impracticable due to technological or economic limitations. In *Sierra Club v. EPA*, the D.C. Circuit provided clear guidance as to the criteria that EPA must meet to justify the application of section 112(h) work practices. The court explained that section 112(h) "allows EPA to substitute work practice standards for emission floors only if measuring emission levels is technologically or economically impracticable." The data collected by EPA during the ICR process clearly demonstrate the challenges associated with testing of natural gas-fired boilers. Natural gas is a very clean, low-HAP fuel, which means that testing of these units results in data that are close to detection limits or the quantitation capability of EPA's test methods. For example, some of the lowest HAP levels for the units in the database for the Gas 1 subcategory are detected at levels considerably lower than undetectable levels achieved in other tests. This demonstrates that the lowest levels and detection limits are not reproducible. Furthermore, the levels of HAP emitted by gas-fired units in the database are extremely low, and in some cases are undistinguishable from ambient air near the lowest detect levels. The sample results, therefore, are more likely "noise" than numbers representing actual emissions.

The economic impracticability associated with measuring emissions from natural gas boilers and process heaters relates directly back to the technical limitations of EPA test methods when used with a low-HAP fuel such as natural gas. As noted above, the application of EPA test methods to measure natural gas units results in unreliable data given that the emissions are so low as to be well beyond what the test methods can actually measure or detect. This will require sources to either repeat these tests or significantly lengthen the periods for the tests, which will only serve to make already expensive tests even more costly. Consequently, this will be a considerable cost for facilities that may have a number of boilers/process heaters requiring emission testing. Such considerable testing costs are not justified in light of the extensive limitations of EPA test methods. Given the technical and economic impracticability of measuring emissions from natural gas units, it is appropriate therefore, based on the criteria in section 112(h), that EPA impose work practices on this subcategory of boilers and process heaters.

Such low HAP emissions also support EPA taking a harder look at delisting major source natural gas-fired boilers and process heaters under section 112(c)(9) of the CAA. As noted above, the ICR data indicate that HAP emissions from natural gas-fired boilers and process heaters are often at the detection level for EPA test methods or at ambient air levels. In addition, as noted earlier, EPA has determined in the rulemaking applicable to boilers at area sources that natural gas-fired units do not emit any mercury, arsenic, beryllium, cadmium, lead, chromium, manganese, nickel, POM (as 7-PAH), ethylene dioxide, and PCB, and therefore, regulation of those sources are not necessary to meet the 90% requirement in section 112(c)(3).¹³ Given that HAP levels for natural gas-fired units likely meet the threshold requirements in section 112(c)(9), the Auto Group recommends that EPA seriously consider undertaking the process for delisting these very low-HAP sources, or at the very least, delist units that are under a certain heat input capacity, e.g., less than 100 mmBtu/hr.

B. Section 112(h) Work Practices for Natural Gas-Fired Boilers Over 10 mmBtu/hr Are Appropriate as a Matter of Policy.

The application of work practices to natural gas-fired boilers/process heaters also is justified as a matter of public policy. As EPA notes in the preamble, requiring natural gas-fired boilers and process heaters to install costly add-on controls may create a disincentive for switching to natural gas.¹⁴ The proposed work practices approach for natural gas boilers/process heaters eliminates the disincentive that would be created by stringent emissions limits that penalize the low-HAP emissions of this fuel. As noted earlier in these comments and as demonstrated by EPA's database for this rulemaking, natural gas-fired boilers and process heaters have some of the lowest HAP emissions and therefore pose very low risk. Consequently, many auto facilities already have expended large amounts of capital switching to natural gas as a means to minimize regulatory concerns.

For example, a number of facilities have converted coal-fired boilers to burn natural gas (with some having fuel oil back-up and/or ability to burn landfill gas as well) over the last couple decades, which has helped areas comply with new, more stringent National Ambient Air Quality Standards (NAAQS). For those facilities that have not converted, stringent emission limits that necessitate costly add-on controls will serve to discourage further conversions to lower HAP fuels. Specifically, if both coal-fired boilers and natural gas-fired boilers are subject to stringent emission limits and require costly add-on controls for purposes of complying with the limits, coal will be more attractive given the historically low price of that fuel. Furthermore, add-on controls will decrease boiler efficiency and increase fuel consumption. These are "absurd results" that run contrary to EPA's efforts to encourage industry to increase energy efficiency and move to cleaner, lower-polluting fuels. These policy considerations further bolster EPA's decision to impose work practices on larger natural gas-fired boilers and process heaters.

C. Emission Limits for Natural Gas-Fired Boilers/Process Heaters are Not Feasible as Defined Under Section 112(h) and EPA's MACT Floor Limits in the Preamble Are Flawed and Inconsistent with the Statute.

In addition, EPA is requesting comment on whether the agency should promulgate the emission limits in the preamble and asks for comment on why emission limits are appropriate for natural gas boilers/process heaters. As discussed above, the Auto Group agrees with EPA's proposed approach to institute work practices for natural gas-fired boilers and process heaters in lieu of imposing emission limits. Emission limits for units burning natural gas are not technologically or economically feasible given the challenges associated with testing units with such low HAP emissions. Such an approach also would be a significant policy shift from how EPA treated these sources in the earlier Boiler MACT promulgated in 2004 and how EPA has addressed natural gas-fired units in other rules.

For example, when EPA made the finding under section 112(n)(1)(A) that the regulation of electric utility steam generating units (EGUs) under section 112 is appropriate and necessary, the agency specifically determined that natural gas-fired EGUs were not included in the listing because the HAP emissions from these units "were negligible based on the results of [EPA's utility Report to Congress]." In fact, in the section of EPA's notice of finding and listing of EGUs under section 112, EPA notes that "[c]onversion of coal- and oil-fired units to natural gas firing effectively eliminates HAP emissions." Furthermore, in the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines, Subpart YYYY,

EPA does not impose emission limits on existing units from any of the subcategories, including natural gas-fired units. Finally, as noted earlier, in EPA's area source proposal for boilers, natural gas-fired units are excluded from that rule because they do not emit the HAPs of concern and they are not needed to meet the 90% HAP reduction requirement in the statute. As these examples demonstrate, setting emission limits for natural gas-fired units is a significant departure from how EPA has treated this fuel under section 112 in other rules.

The discussion above explaining why work practices are justified for natural gas-fired boilers and process heaters also serves to demonstrate why the data in the database are not reliable for setting emission standards for this subcategory of units. Given the very low-HAP emissions from natural gas-fired units, testing of these units results in data that are close to the detection limits for EPA's test methods or beyond the quantitation capability of these tests. Thus, the data in the database are not reliable and not reproducible because the data often times represents noise as opposed to actual emissions data.

The Auto Group also has significant doubts as to whether EPA has performed a thorough Quality Assurance/Quality Control (QA/QC) review of the database itself. The background document in the docket providing EPA's floor analyses for the potential Gas 1 floors in the preamble indicates that EPA included in its analysis direct-fired process heaters, which are not supposed to be included in the rule. Specifically, EPA included a direct-fired rod/bar mill furnace (CORockyMtnSteel212) among the natural gas-fired units comprising the floors for hydrogen chloride (HCl), carbon monoxide (CO), and dioxins/furans (D/F). According to the owner and operator of the Rocky Mountain Steel unit, the unit is a direct-fired re-heat furnace where steel billet intermediate product comes into direct contact with the products of combustion. This explains why the test data for the unit shows such low CO and D/F levels. Such database errors call into question whether EPA has included the correct units in the database used to set the MACT floors in the proposal and whether EPA has undertaken the necessary QA/QC of the database.

Another serious concern with the emission limits included in the preamble is that the MACT floor analysis performed by EPA for natural gas-fired boilers and process heaters is severely flawed. EPA has used a pollutant-by-pollutant or HAP-by-HAP analysis that relies on a different set of best performing sources for each separate HAP standard. EPA applied the same approach in the New Source Performance Standards and Emission Guidelines for Hospital/Medical/Infectious Waste Incinerators (HMIWI), which are currently being challenged before the D.C. Circuit. This "cherry picking" of the best data in setting each standard disregards the sources from which the data are gathered and results in a hypothetical set of best performing sources rather than the actual performance of one or more real sources.

In fact, the database shows that not a single facility in the Gas 1 subcategory can meet all five of the emission limits simultaneously. Moreover, the sources in the database indicate that there is no demonstrated control technology that would allow units to meet the HAP limits in the rule or no unique characteristics that explain why certain units can achieve lower emissions levels than other units. Furthermore, units that drive the floors have no vendor guarantees or add-on control technologies for HAP. Thus, there is no pathway identified for compliance. Basing emission

limits on the data for the subcategory, therefore, is arbitrary, capricious and an abuse of discretion.

In addition, EPA's floor-setting approach is flawed and inconsistent with the statute in that it ignores the requirement in section 112(d)(1), (2), and (3) to base emission standards on the performance of "sources" in the category or subcategory and that EPA's discretion in setting such standards is limited to distinguishing among classes, types, and sizes of sources. These provisions of section 112(d) make clear that standards must be based on actual sources and cannot be the product of HAP-by-HAP parsing that results in a set of composite standards that do not reflect the overall performance of any actual source in the subcategory. Congress provided express limits on EPA's authority to parse units and sources for purposes of setting standards under section 112 and that express authority does not include the ability for EPA to distinguish units and sources by individual pollutants as is proposed in this rule. Thus, EPA's floor approach and MACT floors themselves are arbitrary, capricious and an abuse of EPA's discretion.

Additionally, EPA's approach to subcategorizing the boilers and process heaters in the Gas 1 subcategory for purposes of establishing the potential floors in the preamble fails to account for units designed and operated to minimize emissions of oxides of nitrogen (NOx) to comply with state and federal permit limits. Units operated to keep NOx levels low will have higher emissions of CO. Thus, CO emissions from these units will be higher than boilers not designed or operated to keep their NOx emissions low and in compliance with permit limits. The CO floor level in the preamble for Gas 1 units ignores these design issues and any emission limits based on the potential CO floor level in the preamble would be difficult, if not near impossible, for these boilers to achieve while also meeting the required NOx permit limits. EPA has discretion to account for design characteristics when setting floors and has failed to do so.

In light of the problems with the database and the difficulties and challenges with testing and setting standards for natural gas-fired boilers/process heaters explained above, EPA is more than justified in proposing section 112(h) work practice standards for these units. Such an alternative standard is consistent with the statute's authorization for EPA to substitute section 112(h) standards in those cases where "the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations."

D. Proposed Work Practices for Natural Gas-Fired Boilers/Process Heaters Require Further Clarification and Revision.

Overall, the Auto Group supports EPA's proposed work practice tune-up requirement for natural gas boilers and process heaters. In general, the proposed tune-up requirement incorporates several key references to the manufacturers' specifications for the affected unit, which is an appropriate and reasonable approach for these types of standards. Manufacturers' specifications provide specific guidelines for optimizing performance and efficiency of affected units. For example, any regulatory requirements that would impose a specific CO limit instead of referencing the manufacturers' specifications could have the unintended effect of increasing NOx emissions from a particular unit thereby resulting in compliance problems with other regulatory requirements. Specifically, as is well known in engineering circles, there is an inverse relationship between NOx and CO emissions from combustion sources. In other words, if CO

emissions decrease from a boiler, NO_x emissions will increase. This could result in an exceedance of emission limits in state permits and other regulatory requirements. Moreover, a decrease in CO emissions can lead to a decrease in thermal efficiency as well, which will lead to an increase in fuel consumption by the unit and could have the counter effect of increasing HAP emissions from the unit. For these reasons, EPA's proposal to rely on manufacturers' specifications for the tune-up requirement is a technologically sound and reasonable approach.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Britt S. Fleming

Commenter Affiliation: Auto Goup

Document Control Number: EPA-HQ-OAR-2006-0790-1916.1

Comment Excerpt Number: 5

Comment: Requirement for Individual Gas Meters in § 63.7540(a)(10)(vi)(C) Is Unnecessarily Burdensome - The proposed work practice requirement for natural gas-fired boilers and process heaters in § 63.7540(a)(10)(vi)(C) would require a source to include in the on-site annual report the "type and amount of fuel used over the 12 months to the annual adjustment." This proposed requirement is of concern to the Auto Group. Most facilities do not have individual gas meters for tracking the amount of fuel used on the smaller in-plant boilers and process heaters. In fact, EPA has allowed many companies to apportion natural gas fuel usage to boilers subject to the industrial boiler New Source Performance Standards (NSPS), Subpart Dc, or keep a record of the fuel delivered to the property during the calendar month. In addition, new reporting requirements of GHG emissions also are accomplished on a facility-wide basis and utilize the billing data from the main meter for the facility (or group of facilities).

Installing separate meters would be incredibly expensive, especially for complex manufacturing sources that have numerous affected sources. For example, one company participating in the Auto Group has 12 boilers and process heaters at a single facility. With an individual meter costing between \$10,000-15,000 to install, a facility would have a compliance cost range of \$120,000-180,000 just for the individual gas meters alone. While auto companies already are tracking and reporting fuel use on a facility wide basis for Title V annual emission reports and other state regulatory requirements, this data is on total fuel use and not on a boiler/process heater-specific basis. EPA needs to further explain and justify why this burdensome requirement is necessary for all the natural gas units given that individual gas usage data would not provide any useful information and is not necessary to demonstrate that a tune-up has been properly performed.

EPA Should Consider Raising the Capacity Threshold for Annual Tune-Ups -The Auto Group supports EPA's requirement of less frequent tune-ups for smaller boilers/process heaters in lieu of emissions limits. EPA uses a heat input capacity of 10 mmBtu/hr as the threshold for requiring owners and operators of natural gas-fired boilers and process heaters to perform an annual tune-

up as opposed to a biennial tune-up. While EPA explains in the preamble that work practices are appropriate for smaller boilers and process heaters that have smaller stack diameters, the agency does not explain why a heat input capacity of 10 mmBtu or less is the appropriate cut-off for requiring biennial as opposed to annual tune-ups. The Auto Group suggests that EPA consider raising the heat input capacity threshold that triggers annual tune-ups to those boilers/process heaters with a heat input capacity of greater than 100 mmBtu/hr. Larger boilers (i.e., those greater than 100 mmBtu/hr) can benefit from annual tune-ups due to a more noticeable reduction in fuel use. The reduced fuel use for these larger units also results in cost savings as well as lower HAP emissions and use of this threshold heating rate would be consistent with the industrial boiler NSPS. Boilers with a heat input capacity of less than 100 mmBtu will not benefit as much from such frequent tune-ups given that experience with these smaller boilers indicates that there is rarely a change in the boiler performance from tune-up to tune-up. For this reason, EPA also should consider establishing biennial tune-ups for boilers with a capacity of 30 through 100 mmBtu/hr and every five years for boilers sized 10 to 30 mmBtu.

For very small natural gas boilers with a heat input capacity of less than 10 mmBtu/hr, EPA should reconsider imposing a work practices requirement given that emissions from these small boilers are not significant. Many SIP-approved states have excluded these small boilers from permit regulations and they are not covered by the scope of the industrial boiler NSPS. EPA should be consistent with these other regulatory programs and exclude small boilers from the work practices requirements.

EPA also should consider increasing the time between required tune-ups once it is demonstrated that several consecutive (e.g., annual) tune-ups have produced minimal improvements in boiler operation as identified by decreases in CO emissions. EPA has allowed a similar kind of compliance flexibility in other regulations. For example, in the NESHAP for Steel Pickling, Subpart CCC, EPA allows the permitting authority to approve an alternative schedule for performance testing that would allow testing less frequently than annually. In addition, in the NESHAP for Primary Lead Smelting, Subpart TTT, EPA allows for less frequent testing when facilities are able to demonstrate consistent compliance with the standards. The rule allows operators up to 24 months between compliance tests if the results of the three most recent compliance tests demonstrate compliance. EPA also allows this kind of compliance flexibility in other programs. For example, in Subpart BB of the RCRA Regulations applicable to valves in gas/vapor service, EPA permits sources to monitor valves for leaks less frequently if a leak is not detected for two successive months. In addition, sources can skip quarterly leak detection periods for valves if a low percentage of valves are leaking.

EPA should apply the same testing and compliance flexibility in the final rule for boilers/process heaters that can demonstrate minimal change between annual tune-ups. Minimal change could be defined as less than a 25% change in CO emissions. The Auto Group suggests that EPA insert in § 63.7540(a)(10) the following language to reflect the concepts discussed above:

(vii) If last two tune-ups performed pursuant to (a)(10) of this section did not require more than minimal (less than a 25 percent change in the CO ppm) adjustment of the burner or the air-to-fuel ratio as required by (a)(10)(ii) and (iii) of this section, the owner or operator of a boiler or process heater in the Gas 1 (NG/RG) subcategory with a heat input capacity of greater than 100

million Btu per hour shall be allowed 26 months from the last tune-up to conduct the next tune-up. (viii) Boilers and process heaters in the Gas 1 (NG/RG) subcategory with a heat input capacity of less than 10 million Btu per hour are not required to conduct a tune-up.

Such language would provide those sources that have boilers/process heaters that remain within unit specifications with additional flexibility as well as recognize that smaller boilers require minimal adjustments between tune-ups.

A Boiler or Process Heater That Has Not Operated in the Previous Year Should Be Allowed to Skip the Annual Tune-up Requirements in §§ 63.7540(a)(10) and (11) - The proposed work practices requirement for natural gas-fired boilers and process heaters in §§ 63.7540(a)(10) and (11) do not take into account the operational status of a unit and should allow more flexibility when boilers or process heaters are not operational or have not operated in the past year. As facilities change operational practices, the operational demand for a boiler may not be present and the boiler may be kept in standby for a period of time. Thus, if a boiler is not in use, an owner or operator of the unit should not be required to startup and operate the boiler just for the sake of performing a tune-up.

The Auto Group recommends that EPA amend the language in §§ 63.7540(a)(10) and (11) to include the following text indicated in underline to address this issue:

(10) If your boiler or process heater is in either the Gas 1 (NG/RG) or Metal Process Furnace subcategories and have a heat input capacity of 10 million Btu per hour or greater, you must conduct a tune-up of the boiler or process heater annually to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (a)(10)(vi) of this section. A boiler that is not operating when the annual tune-up is due must perform the tune-up within 60 days of resuming operation.

* * * *

(11) If your boiler or process heater has a heat input capacity of less than 10 million Btu per hour, you must conduct a tune-up of the boiler or process heater biennially to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (a)(10)(vi) of this section. A boiler that is not operating when the biennial tune-up is due must perform the tune-up within 60 days of resuming operation.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Britt S. Fleming

Commenter Affiliation: Auto Goup

Document Control Number: EPA-HQ-OAR-2006-0790-1916.1

Comment Excerpt Number: 10

Comment: EPA Needs to Amend A Number of Rule Provisions to Reflect that Natural Gas Boilers and Process Heaters are Subject to Work Practices.

A number of the proposed initial compliance, monitoring, notification and recordkeeping requirements in the rule conflict with the requirements in § 63.7540 and Table 2 specifying that natural gas boilers and process heaters are subject to work practices and not emission limits. The following provisions need to be revised in the final rule to properly reflect the requirements for natural gas units:

* Proposed § 63.7510, which addresses initial compliance requirements, is unclear in certain subsections with regard to whether the requirements only apply to units demonstrating compliance with emission limits. This provision should make it clear that the initial compliance demonstration requirements only apply where there is an emission limit applicable to a unit and that a unit subject to work practices is not required to demonstrate compliance. The wording in subsection (c) and (d), for example, is overly broad and could be interpreted to include units subject to work practice standards.

*Proposed § 63.7525(a), which requires continuous emission monitoring systems (CEMs) for CO and oxygen for boilers ≥ 100 mmBtu/hr, does not specify that it is only applicable to units subject to emission limits. This requirement is not appropriate for natural gas-fired boilers/process heaters that do not have emission limits. The text of this provision should be reworded to state: "If a boiler is subject to a CO emission limit and is greater than 100 mmBtu/hr, then you must install, operate, and"

*Proposed § 63.7545(b), which requires Initial Notification for existing boilers and process heaters, is not appropriate for natural gas-fired boilers and should be clarified to exclude boilers that do not have emission limits. EPA has excluded from notification requirements sources that are subject to work practice standards in other MACT standards and should do the same in this rule for natural gas-fired boilers/process heaters.

*Proposed § 63.7545(e), which describes what must be included in the Notification of Compliance, requires further revision. This proposed provision references (e)(1) through (9) but there is no (8) and (9) included in the proposal. In addition, this proposed requirement is not appropriate for natural gas-fired boilers and should be clarified to exclude boilers that do not have emission limits. Compliance certification for remaining MACT requirements (i.e. annual tune-up) for natural gas-fired boilers and process heaters can be addressed by the existing Title V Compliance Certifications.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Britt S. Fleming

Commenter Affiliation: Auto Goup

Document Control Number: EPA-HQ-OAR-2006-0790-1916.1

Comment Excerpt Number: 12

Comment: EMISSION LIMITS FOR NEW AND EXISTING BOILERS/PROCESS HEATERS BURNING “OTHER GAS” ARE NOT ACHIEVABLE FOR LANDFILL GAS UNITS AND ARE NOT APPROPRIATE FOR THIS FUEL TYPE; EPA SHOULD APPLY WORK PRACTICES TO NEW AND EXISTING LANDFILL GAS UNITS.

Despite using a work practices approach for natural gas-fired boilers and process heaters, EPA proposes stringent emission limits for new and existing “units designed to burn other gases” (also referred to as the Gas 2 category). This subcategory is defined in proposed § 63.7575 as including “any boiler or process heater that burns gaseous fuels other than natural gas and/or refinery gas not combined with any solid or liquid fuels.” “Gaseous fuel” is further defined as including, but not limited to, “natural gas, process gas, landfill gas, coal derived gas, refinery gas and biogas.” A number of facilities owned and operated by companies in the Auto Group have boilers/process heaters that burn landfill gas. While landfill gas is a newly derived byproduct of waste materials, it is not itself a waste, and units combusting this fuel, therefore, if regulated, would fall under section 112 of the CAA and not under section 129.

Furthermore, companies participating in the Auto Group have advocated in the past in comments submitted on the 2003 Boiler MACT proposal that methane from landfill gas should be considered “natural gas.” Importantly, this was raised in the context of pointing out that natural gas units should not be regulated at all under section 112 because they are such low emitters of HAP, among other reasons. In light of this, we are very concerned about EPA’s proposed approach for regulating landfill gas units, the methodology EPA used to develop the proposed emission limits that would apply to landfill gas units, and the impact that these unachievable limits will have on the future beneficial use of a renewable fuel such as landfill gas. Moreover, given that landfill gas is often processed such that it can be injected directly into natural gas pipelines as described below, EPA should regulate landfill gas in the same fashion as the agency ultimately regulates natural gas. To address these issues, the Auto Group recommends work practices in lieu of emission limits for landfill gas units similar to those imposed on natural gas boilers/process heaters.

A. Work practices are More Appropriate for Boilers/Process Heaters Using Landfill Gas and Fit with the Criteria for Section 112(h) Work Practices.

Despite the fact that three of EPA’s five proposed HAP floors (particulate matter (PM), mercury (Hg), and D/F) for the Gas 2 subcategory include data from a single landfill gas unit (BMW), EPA’s data for landfill gas units are not accurate and do not reflect what is achieved in practice by these sources. For example, there appears to be an error in the Hg data for the BMW unit. The error seems to result from not including the detection limits for undetected values when summing the five different analytical fractions for the Method 29 sampling train. EPA specified in the guidelines for the ICR that detection limits should be included in the data sums submitted to EPA. The lab analysis report for the BMW unit for Method 29, however, shows total mercury catches which include only the detected value in the HCl rinses. If summing detection limits with the detected values following EPA guidelines for the tests, the total mercury catches would be approximately four times higher. This would result in a much higher Hg floor for the Gas 2 subcategory.

Not only does this error raise the issue of whether other units have similar data problems, but it also highlights yet again the significant challenges associated with EPA trying to establish emission limits for such low-emitting units where the emissions are at the detection limit (or lower) of the test method. The test methods used for the ICR data were designed and intended to determine whether a source's emissions of a particular pollutant are above a defined limit. EPA specified that in-stack detection limits be calculated from laboratory detection limits (as "floor" values) and actual test run data. This approach misrepresents reality in two critical ways. First, EPA defines the detection limit as the lowest value differentiable from zero (a departure from the conventional definition of a detection limit as the lowest value differentiable from a blank). Second, EPA's calculation of in-stack detection limits ignores the variability in method performance introduced by sampling and related activities, including sample train preparation and recovery. The results of EPA's approach are unrealistically and indefensibly low emission estimates from tests where the non-detects are the most common outcome.

This is particularly true with the proposed emission limit for D/F, which is based on three test runs (including non-detect values) from a single unit (BMW). EPA's use of one unit's test runs and non-detect limits results in an emission limit for D/F that is prohibitively stringent. In fact, vendors for D/F controls cannot guarantee meeting this limit.

Another significant concern with the EPA data for the Gas 2 units relates to the CO data. Specifically, by setting the proposed MACT floor limit for CO at 1 ppm for the Gas 2 subcategory, EPA is basically setting a standard at the limits of detection for the test method. Monitoring CO to a limit of 1 ppm could be considered at the limits of detection because of technical issues related to calibration drift and relative accuracy. Performance Specification (PS) 4A, developed primarily for CEMs that comply with low emission standards (less than 200 ppmv), requires dual range capability. For the low range scale, the high-level value must be between 1.5 times the pollutant concentration corresponding to the emission standard level and the span value. For the high-range scale, the high-level value shall be set at 2000 ppm, as a minimum, and the range shall include the level of the span value. There must be no concentration gap between the low-and high-range scales. PS 4A also requires that the CEMs calibration not drift or deviate from the reference value by more than 5 percent of the established span value. If the low range monitor uses 10 ppm as span gas for calibration, the allowable calibration drift is 0.5 ppm. This amount of drift is 50 percent of the proposed limit and could result in calculated emission exceedances when have not actually occurred.

The allowable calibration drift for the high-range scale is 5 percent of 2000 ppm which equals 100 ppm. If a boiler has CO greater than the low range during startup, the emissions averaging will be relying on data from the high-range instrument. A CEM could produce measured values ranging from 0 to 115 ppm when the actual emissions are 15 ppm as measured by Reference Method 10 and the CEM would be meeting the performance specification criteria. This could result in calculated averages that are much greater than actual emissions and result in a falsely calculated emission exceedance.

In addition to these issues, the Auto Group has serious concerns about the representativeness of the data from the landfill gas units in the database. Specifically, the concentration of various contaminants in landfill gas, such as chlorine compounds, varies as the gas is generated from the decomposing materials in the landfill over the years. Such variation is not controllable by the owner/operators of the boilers and process heaters that purchase and utilize the landfill gas. For example, very small levels of various chlorine compounds have been measured in landfill gas purchased in Michigan and those levels tend to vary sample to sample, year to year and are not controllable by the purchaser of the landfill gas. Fortunately, these levels have been low enough to avoid acid (HCl) deterioration of the boilers/process heaters such that landfill gas continues to remain a desirable fuel option. That said, while low, the level of chlorine compounds in the landfill gas is unpredictable, and therefore, there is no assurance or confidence that the results of emission tests for landfill gas boilers and process heaters are repeatable from test to test. This also calls into question whether the emission testing on such units accurately reflects what other units covered by the rule (and using gas from different landfills) would achieve.

Similar to the discussion above in Section I with regard to the economic impracticability of applying EPA test methods to natural gas-fired boilers and process heaters, the considerable challenges associated with using EPA test methods for landfill gas units, which also have very low HAP emissions, is economically infeasible. As with natural gas-fired units, the HAP emissions from landfill gas boilers and process heaters are in many cases beyond the quantification capabilities of the test or at the limit of detect for the test method. This means that affected sources would have to either repeat costly testing or in other cases run expensive test methods for longer periods of time, which will only serve to further increase costs. The use of the EPA test methods, therefore, for determining emissions from landfill gas units is not economically practicable.

To address these concerns, the Auto Group recommends that EPA impose work practices on landfill gas units in lieu of emissions limits. As discussed earlier, CAA section 112(h) allows EPA to set work practice standards in situations where “it is not feasible in the judgment of the Administrator to prescribe or enforce an emission standard” The definition of “not feasible to prescribe or enforce an emission standard” is defined in the CAA as any situation where “the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations.” In light of the database problems, the issues with test method detection limits and monitoring issues, and the challenges experienced with testing landfill gas, the Auto Group recommends that EPA impose work practices in lieu of the emission standards contained in the proposal. Furthermore, considering that landfill gas also is processed into pipeline grade natural gas and can be injected directly into pipelines for use by natural gas customers, it is only appropriate to apply work practices to landfill gas units similar to what is being proposed for natural gas-fired units and process heaters.

B. EPA’s Proposed Approach for Landfill Gas Units Will Discourage the Beneficial Use of Landfill Gas.

The proposed unachievable emission limits applicable to landfill gas units are in direct conflict with programs EPA has put in place to promote the advantageous use of this fuel. EPA established the Landfill Methane Outreach Program (LMOP) in 1994, which, according to EPA’s

website, is a voluntary assistance and partnership program that encourages the use of landfill gas as a renewable, green energy source. EPA's website explains that the agency "launched LMOP to encourage productive use of [landfill gas] as part of the United States' commitment to reduce GHG emissions under the United Nations Framework Convention on Climate Change." By preventing emissions of methane through the development of landfill gas energy projects, LMOP strives to assist businesses, states, energy providers, and communities in protecting the environment and building a sustainable future. EPA notes on its website that there are 519 operational landfill gas energy projects in the U.S. EPA also estimates that approximately 530 other landfills are good candidates for projects to turn their gas into energy.

As EPA describes on its website, landfill gas is extracted from municipal solid waste landfills and then collected where it is processed and treated for further use.⁷⁴ Depending on the design, up to 60-90% of the methane emitted from a landfill is captured by a landfill gas energy project thereby significantly reducing a potent GHG.

According to EPA's website and recent presentation materials from EPA, landfill gas can be used to generate electricity and is currently powering close to 1 million homes (supplying 13 billion kilowatt-hours). Landfill gas also can replace fossil fuels in industrial and manufacturing operations or can be upgraded to pipeline-quality gas where the gas may be used directly or processed into an alternative vehicle fuel. In fact, according to the DTE Biomass Energy's website, landfill gas is processed to a degree that it is of natural gas quality and can be injected directly into the natural gas pipeline distribution system for use by consumers.

In light of the importance of encouraging the use of landfill gas as a renewable green energy fuel as evidenced by EPA's LMOP efforts and projects, the Auto Group urges EPA to impose work practice standards on landfill gas boilers/process heaters at major sources instead of emission limits. As explained above, landfill gas is an important energy resource and EPA should promote the continued use of this fuel rather than prevent boilers/process heaters from combusting landfill gas because these units are incapable of meeting the proposed emission limits (or some other emission limit that EPA believes represents the average of the best performing 12%). Furthermore, the use of landfill gas reduces the GHG load and offsets the use of other fossil fuels, which are higher in HAP emissions and are non-renewable. Penalizing major sources using landfill gas-fired boilers/process heaters by imposing an unachievable emission limit does not make sense from a policy perspective.

If finalized as proposed, the emission limits applicable to landfill gas units will have the result of severely restricting the future use of landfill gas and could, in all likelihood, lead to this beneficial fuel being once again flared or routed to other devices that may not be as efficient in combusting landfill gas or as effective in reducing other potential emissions (e.g., GHGs) as the boilers/process heaters currently being used. It is important to utilize the energy that landfill gas can provide and reduce the GHG load associated with the use and dependence on other fossil fuels. For these reasons, EPA should impose work practice standards on landfill gas units similar to what is being proposed for natural gas and refinery gas units.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arthur N. Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management, NESCAUM

Document Control Number: EPA-HQ-OAR-2006-0790-2137.1

Comment Excerpt Number: 17

Comment: NESCAUM also recommends eliminating the proposed “fuel cell” subcategory for wood-fired boilers in the MACT rule. A fuel cell is generally understood to create electricity directly from a fuel gas without combustion.¹ As such, a true fuel cell would not be subject to the ICI boiler rule. One does not find in the technical literature a discussion of “fuel cell” combustion units. The units in EPA’s database that it styles as “fuel cell” units appear to be newer than most, and for that reason, relatively fuel efficient and low-emitting, but there does not appear to be any difference in fundamental design that would warrant establishment of a separate category.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Britt S. Fleming

Commenter Affiliation: Auto Goup

Document Control Number: EPA-HQ-OAR-2006-0790-1916.1

Comment Excerpt Number: 17

Comment: Proposed Rule Requirements Fail to Account for Gaseous Fuels and are Unsuitable for Landfill Gas Units Further Demonstrating That Work Practices are a More Appropriate Approach for These Units.

There are a number of aspects of the proposed rule that further highlight why work practices are more appropriate for landfill gas units and why EPA’s proposed emission limits and compliance requirements fail to address the unique challenges of using landfill gas. For example, the initial compliance test requirement proposed in § 63.7510(a) and (b) that the source measure the chlorine content in the feed stream is not technically feasible for landfill gas units. As discussed above, there is considerable variability in the gas that is obtained from a landfill and the levels of chlorine, which are very low, can still fluctuate which can create potential compliance problems. In addition, in proposed § 63.7510(a) and (b), EPA does not specify sampling methods for gaseous fuels. Specifically, the initial compliance requirements include “conducting a fuel analysis for each type of fuel burned in your boiler or process heater according to

§ 63.7521 and Table 6 to this subpart” This requirement is inconsistent for a boiler that burns both natural gas and landfill gas given that proposed § 63.7521 and Table 6 do not address sampling requirements for these gaseous fuels.

Other proposed sections of EPA’s rule also are problematic in that they fail to consider landfill gas in the requirements. These sections are as follows:

- *Proposed § 63.7515(f), which specifies requirements for a monthly fuel analysis that are unsuitable for landfill gas units since there is no fuel sampling method specified.

- *Proposed § 63.7520(c), which requires testing using the highest content of chlorine and mercury while testing at the maximum normal operating load. It is not possible for sources using landfill gas to change the chlorine and mercury content for purposes of a performance stack test. Furthermore, since these types of boilers do not typically operate at maximum load, maximum normal operating load would need to be replaced with maximum available load during the performance test in order to properly account for these units.

- *Proposed § 63.7521, which addresses fuel sampling but is completely focused on liquid and solid fuels. Given the focus of the provision, EPA needs to clarify that this section is not intended for gaseous fuels. As proposed, this section makes it impossible for sources using landfill gas to comply since there are no methods for gaseous fuels identified. For example, § 63.7521(b)(2)(iv) requires identification of the fuel sampling methods and expected minimum detection levels for chlorine and mercury. Without an identified sampling method, it is not possible to anticipate the minimum detection level. In addition, § 63.7521(c) requires sampling according to (c)(1) (sampling from a belt feeder) or (c)(2) (sampling from a fuel pile). Neither of these sampling methods can be used for units using landfill gas. Similarly, the requirements to prepare fuel sample composites at § 63.7512(d) are inappropriate for landfill gas.

- *Proposed § 63.7520(e), which requires use of F-Factors from EPA Method 19, Sections 12.2 and 12.3. Table 19-2 shows “default” F-Factors for several fuel types; however, there is no default F-Factor for landfill gas. This may be due in part to the fact that landfill gas can vary from landfill to landfill and even within the same landfill over time.

- *Proposed § 63.7555(d)(1), which requires monthly fuel usage records for all boilers and process heaters, is a problem since facilities do not have separate meters for every process heater and boiler. Many facilities have centralized gas meters and do not have separate metering of the small boilers and process heaters. It should be sufficient to demonstrate compliance by keeping records of the fuel type burned (i.e., landfill gas) and information concerning the design maximum heat input (i.e., mmBtu/hr). See the discussion above regarding separate metering.

- *Proposed § 63.7555(d)(4), which requires calculation of a HCl emission rate for each boiler and process heater, does not make sense where sources use gaseous fuels from a common distribution system since the gaseous fuel would be the same for each unit. See the discussion above regarding separate metering.

*Proposed § 63.7555(d)(5), which requires calculation of a mercury emission rate for each boiler and process heater, also is ill-suited for sources using gaseous fuels from a common distribution system since the gaseous fuel would be the same for each unit.

F. EPA's Proposed Averaging Option for Units Complying with Emission Limits Does Not Provide the Intended Flexibility.

To help sources comply with the proposed emission limits for PM, HCl and Hg, EPA is proposing in § 63.7522 to allow sources to use emissions averaging. Use of emissions averaging would allow owners and operators of an affected source to demonstrate that the source complies with the proposed emission limits by averaging the emissions from an individual affected unit that is emitting above the proposed emission limits with other affected units at the same facility that are emitting below the proposed emission limits. EPA further acknowledges that “emissions averaging represents an equivalent, more flexible and less costly alternative to controlling certain emission point to MACT levels” and its application “would not lessen the stringency of the MACT floor limits and would provide flexibility in compliance, cost and energy savings to owners and operators.”

In the proposed Boiler MACT, EPA has proposed that owners and operators of existing – but not new – affected sources be permitted to demonstrate compliance with the proposed emissions limitations by emissions averaging for units at the affected source that are within a single subcategory. Under this proposal, emissions averaging could only be used between boilers and process heaters in the same subcategory at a particular affected source.

The proposed emission averaging is explained as allowing averaging only within a subcategory although it is not clear from the proposed rule language if this is what EPA intended. While the wording under the separate stack requirements does seem to have this restriction, the wording under the common stack requirements does not. EPA provides no justification for restricting averaging to a given subcategory nor is it rational to impose such a restriction.

Some affected units involve multiple boilers operating in different subcategories (e.g. stokers and pulverized coal). These boilers are generally located in separate powerhouses. The goal of emissions averaging is to allow facilities to over control some emissions points while under controlling others, thus achieving the required reductions in the most cost-effective manner possible. This could be best achieved by EPA removing the restriction (or clarifying its intent) that such averaging would be allowed for all affected units, regardless of whether the boilers emit through separate or “common stacks.” The rule should allow for averaging across all units regardless of category of pollutants to be averaged so long as emissions from a single unit can be quantified with testing either in the breeching or in the stack when other units are not operating.

Allowing averaging across subcategories within the rule is consistent with the four averaging criteria described in the preamble:

- (1) No averaging between different types of pollutants;
- (2) No averaging between sources that are not part of the same affected source;
- (3) No averaging between individual sources within a single major source if the individual sources are not subject to the same NESHAP; and
- (4) No averaging between existing sources and new sources.

Thus, averaging across subcategories is a possible interpretation of the proposal, and EPA should revise this in the final rule.

EPA provides no justification for restricting averaging to a given subcategory nor is it rational to impose such a restriction. Emissions averaging generally allows a facility to avoid otherwise cost-prohibitive compliance options by over-controlling some other emission unit in a more cost-effective combination. It also has corresponding environmental benefits, by creating an incentive to burn more natural gas or renewable fuels as a strategy to average out emissions from a coal-fired unit. If the proposed Boiler MACT does not allow averaging across the different fuel categories, EPA removes the incentive for sources to turn to cleaner-burning fuels to achieve averaging benefits.

The legal precursor to introducing emissions averaging is *Chevron U.S.A., Inc. v. NRDC*. In *Chevron*, the Supreme Court held that EPA regulations allowing states to treat all of the pollution-emitting devices within the same industrial grouping as though they were encased within a single “bubble” were based on a reasonable construction by EPA. This case opened the door to more specific emissions averaging efforts, such as those implemented in the 1994 Hazardous Organic NESHAP (HON Rule). Several rules have followed the HON Rule in authorizing emissions averaging, and the D.C. Circuit has never invalidated the approach. The proposed emissions averaging provisions in the proposed Boiler MACT are directly based on the emissions averaging provisions in the HON.

In the HON Rule, EPA thoroughly examined the legal basis for emissions averaging, and explored the degree of averaging permitted under section 112(d) of the CAA. At the end of its review, EPA concluded that the statute “does not define source category, nor does it impose precise limits on the Administrator’s discretion to define source.” EPA further acknowledged that the CAA does not limit how standards are to be set for a category or subcategory beyond requiring that it be applicable to all sources in a category, be written as a numerical limit wherever feasible, and be at least as stringent as the floor.

In promulgating the HON emissions averaging requirements, on which the proposed Boiler MACT relies, EPA thus concluded that “the relevant statutory language is broad enough to permit the Administrator to allow sources to meet the MACT through the use of emissions averaging provided the standard applies to every source in the category, averaging does not cross source boundaries, and the standard is no less stringent than the floor.” Allowing emissions averaging across subcategories within the proposed Boiler MACT is consistent with the parameters established in the HON rule, and reiterated in the preamble for the proposed Boiler MACT. Namely, allowing averaging across subcategories will not result in averaging between (a) different types of pollutants, (b) sources that are not part of the same affected source, (c) individual sources within a single major source if the individual sources are not subject to the same NESHAP, and (d) existing sources and new sources.

There is precedent in other MACT standards for allowing averaging across different types of units of a single source. For example, the HON rule allows process vents, storage vessels, transfer racks, and wastewater streams to all be included in an emission average across an

affected source. EPA reasoned that averaging needed to be allowed across all emission points (except equipment leaks) in order to provide as much flexibility as possible while maintaining an enforceable emission limitation. Similar mechanisms have been adopted in other MACT standards such as the Petroleum Refinery NESHAP and the Boat Manufacturing NESHAP.

As in the HON, the compliance methodology can easily accommodate subcategories with different emission limits for a given pollutant. This is done basically by calculating a weighted average allowable mass emission and a weighted average actual mass emission each month using heat inputs or steam production for each unit.

Averaging across subcategories also should be permitted for dioxins/furans and carbon monoxide. A source should be allowed to comply with the dioxin/furan (D/F) standard via emission averaging. While it may not be appropriate to set numerical emission standards for D/F, if the final rule does include such numerical standards, a source with multiple units could choose to comply by installing a post-combustion control to reduce D/F on some units at a facility.

Additionally, carbon monoxide should be included in the emissions averaging provision, since some units may be able to easily meet the proposed CO limits, while, for others, it may be impossible. To facilitate its inclusion, the emission limitation for CO should be expressed in an alternative form – lb/mmBtu. For the case of units using CEMs to measure CO, precedent exists for this as well, in the emission averaging provision for NO_x found at 40 C.F.R. § 76.11. Heat input should be allowed to be determined using either flow monitors (some units subject to the NO_x budget trading program have these already) or using fuel factors and diluent monitors per 40 C.F.R. Part 60, Method 19.

In addition to the above discussed restrictions on emissions averaging, EPA also imposes a restriction that requires facilities using that option to meet a standard that is 10% stricter than the otherwise applicable limits. EPA should remove this 10% penalty for using emissions averaging because it is arbitrary, unnecessary for environmental protection and reduces the flexibility that averaging provides. EPA asserts that its inclusion further ensures the allowable emissions are at least as stringent as the MACT floor limits without using averaging. However, EPA offers no demonstration of this in the proposal. Given the accuracy of heat input weighted emission calculations, there is no uncertainty that the average emission rates will be any less stringent than when not using averaging. Because EPA already has determined that the standards in the proposed rule achieve the maximum emission reduction achievable for health and environmental protection, to require an additional 10% reduction of emissions has no basis in the environmental underpinnings of the rule. Given that emissions averaging is a compliance alternative, the 10% discount factor constitutes a beyond-the-floor requirement that EPA has not analyzed for its cost, non-air quality and energy impacts, as required by CAA section 112(d)(2). Finally, although the 10% discount may be perceived as a fair “trade-off” for the flexibility of emissions averaging, it still lacks a legal basis and creates a disincentive for sources to use this compliance method. Because the proposed limits in this rule already are so stringent, sources will not be able to ensure an additional 10% reduction in emissions below the limits and imposing this requirement effectively deprives many sources of the availability of the emissions averaging compliance alternative. For these reasons, EPA should delete the 10% discount in the final rule.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Britt S. Fleming

Commenter Affiliation: Auto Goup

Document Control Number: EPA-HQ-OAR-2006-0790-1916.1

Comment Excerpt Number: 24

Comment: EPA also must clarify the definition in proposed § 63.7575 for “unit designed to burn oil subcategory.” As drafted, the definition states that gaseous fuel boilers and process heaters are not included in the oil-fired unit subcategory as long as the combined total hours of operation during gas curtailment, gas supply emergencies, or periodic testing of liquid fuel does not exceed 48 hours. The Auto Group objects to the inclusion of periods of gas curtailment or supply emergencies given that end users have no control over the frequency or duration of these periods. Additionally, the proposed 48 hour limit does not provide adequate time to startup the oil burner, make adjustments and perform stack testing as may be required by state operating permits. This definition should be revised to eliminate the specified 48 hour limit.

The proposed definition in § 63.7575 for “waste heat process heater” also presents a concern that must be addressed by EPA in the final rule. According to the proposed definition, a “waste heat process heater” does not include those waste process heaters incorporating duct or supplemental burners designed to supply 50% or more of the total rated heat input capacity of the waste heat process heater. The threshold for supplemental burners should be based on utilization instead of supplemental burner capacity. For example, supplemental burners are fired at high capacity during startup, but then “throttle back” to minimum level during normal operation. If the burner capacity is limited to less than 50%, then there would be startup problems for some sources.

V. ADDITIONAL SECTION-SPECIFIC COMMENTS

The Auto Group provides the following section-specific comments on the proposal to address concerns that owners and operators would have when complying with an emission limit:

- Proposed § 63.7515

-Subsections (a) and (e) – The definition of the annual time period requirement for performance testing needs to be revised. The requirement to have annual tests completed between 10 and 12 months after the previous performance test may be too restrictive and sources should be allowed to use a more flexible definition of the annual frequency to allow for seasonal variations. Having “annual” defined as less than a full year could result in a situation where a boiler’s annual test must be performed

when there is not adequate cold weather load. For example, if the first test is performed in January, then 11 months later in December, then 11 months later in November, then October, then September when the boiler may normally be shutdown or not able to operate at high enough temperatures to achieve maximum operating conditions. This will also create a problem with the “maximum normal operating load requirement” during performance tests specified at §

63.7520(c). EPA needs to amend this requirement to provide additional flexibility to accommodate seasonal firing and variability.

-Subsection (a) – Requiring annual stack testing for all boilers regardless of size does not make sense and must be revised. Most Title V permits require performance testing to demonstrate compliance with emission limits within the year prior to permit expiration, or at least once per permit cycle (once every 5 years). Thus, sources already are required to demonstrate compliance through emission testing approximately every 5 years. More frequent testing only makes sense for boilers and process heaters that have exceeded the emission limit. The Auto Group recommends that only boilers over 100 mmBtu/hr be subject to the periodic testing and then only when necessary to demonstrate compliance with applicable emission limits, once every 5 years.

-Subsection (b) – The 75% threshold for allowing less frequent performance testing is too stringent. Requiring a source to demonstrate emissions are less than 75% of the emission limit creates a more stringent standard that may not be achievable by any source. Since emission limits are based on MACT floors, a source demonstrating compliance with the MACT limit should be allowed to perform testing on a less frequent schedule. At the very least, the 90% threshold identified at § 63.7555(d)(6) is a more appropriate threshold than the 75% threshold. This also needs to be considered for pollutants that have an emission limit that is close to the detection limit for the test method. See discussion above regarding how other standards allow skipping periodic monitoring without demonstrating compliance with a lower threshold.

-Subsections (b) and (c) – These provisions also should include less frequent performance demonstrations for D/F if it is demonstrated that the D/F limit is being met. EPA does not articulate a reason why a source should not have the same flexibility with D/F as with the other pollutants.

-Subsection (g) – This provision appears to require submittal of all fuel analyses within 60 days after completion of a performance test. This should be clarified to identify that stack testing and the corresponding fuel analysis be submitted within 60 days. Compliance with other fuel analysis requirements can be included in the deviation reporting in the existing Title V program.

*• Proposed § 63.7520(d) – This provision requires three (3) four-hour test runs during a performance test. Increasing test run times from one hour to four hours will significantly increase the costs associated with stack testing. This provision raises the question as to whether the standard test methods are adequate for measuring the pollutants EPA is regulating at such low levels. If a source has emissions that are too low to detect with current approved or promulgated sampling methods, this might be an indication that the limits are so low as to be impractical to regulate and impossible to accurately test. Increasing the sample time for each run to four hours also may not be possible for some sources since industrial and commercial boilers may not have adequate demand or vent enough steam to operate at sufficient load through the three runs.

*Proposed § 63.7522 – The requirements in subsection (c) are unclear in that this provision appears to limit the emission rate demonstrated during the initial compliance test to the emission level that was achieved 30 days after the final rule is published in the Federal Register. This contradicts other parts of the proposed rule where a facility is allowed to burn multiple fuels during the initial compliance test to demonstrate compliance with different fuels. One of the fuels demonstrated may be higher in a particular HAP than what occurred 30 days after publishing in the Federal Register and yet be in compliance with the MACT standard.

*Proposed § 63.7525(a)(6) – This provision addressing monitoring, installation, operation, and maintenance requirements needs to be clarified to identify that monitor downtime when performing maintenance does not constitute a deviation. This should reflect the allowance provided at § 63.7525(d)(2).

*Proposed § 63.7545(f) – This provision requires notification within 48 hours when burning backup fuel during a curtailment event. This notification does not make sense given that backup fuels are allowed by existing permits. Burning a backup fuel is not like burning a new fuel. It would be more appropriate for EPA to require identification of the use of backup fuels as part of the semi-annual compliance report for Title V. Another consideration is that sources would need more than 48 hours to provide notification, which would have to be certified by a responsible official. Furthermore, more than 48 hours may be needed in states that require electronic submittals through internet-based applications. For these reasons this requirement is unnecessary and should be deleted from the final rule.

*Proposed § 63.7555

-Subsection (d)(6) – This provision requires that if consistent with § 63.7555(b) and (c), a source chooses to stack test less frequently than annually, the source must keep annual records that document that the emissions in the previous stack test(s) were less than 90 percent of the applicable emission limit, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year. The Auto Group recommends that EPA eliminate the 10% discount given that a source will demonstrate compliance with the MACT standard, which is what is required.

-Subsection (d)(7), which requires that if a source operates a gaseous fuel unit that is subject to the emission limits specified in Table 1 or 2 to this subpart, and you intend to use a fuel other than natural gas or equivalent to fire the affected unit, you must keep records of the information required by the notification under § 63.7550, and records of the total hours per calendar year that liquid fuel is burned. If the other fuel is landfill gas (note that the fuel does not necessarily have to be a liquid fuel), then the only requirements should be related to the other fuel usage rates (e.g., cubic feet per month or gallons per month).

Table 3 Work Practice Standards — This table contains an error. The Table establishes work practice standards for existing boilers < 10 mmBtu/hr. While there are proposed work practice standards for existing boilers, new boilers < 10 mmBtu/hr are not mentioned. If new units are meant to be excluded from the work practices requirement, EPA must clarify this both in Table 3 and in § 63.7540.

Table 5 Performance Testing Requirements — There is no test method specified for D/F that should be used to comply with the proposed limits.

Table 6 Fuel Analysis Requirements — There are several references to ASTM methods which must be purchased. If compliance requirements in the rule require reliance on ASTM documents, then EPA should make these documents publicly available either on EPA's website or in the docket for the rule.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 25

Comment: In separately filed comments for the major source rule, AF&PA notes the challenges that will be difficult to surmount regarding the much higher limits set for the Major Source Biomass Boilers (See Section XIV, Docket EPA-HQ-OAR-2002-005; we incorporate those comments by reference). The technology for CO emission control does not differ between the major and area source boilers. It is simply illogical to have widely differing limits if EPA is to truly pursue a technology based standard. Any standard set must be comparable.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Britt S. Fleming

Commenter Affiliation: Auto Goup

Document Control Number: EPA-HQ-OAR-2006-0790-1916.1

Comment Excerpt Number: 13

Comment: EPA's Floor Setting Methodology is Flawed, Inconsistent with the Statute, and an Abuse of Discretion.

As discussed earlier in these comments in Section I above, the methodology that EPA employs to set the MACT floors in the proposal is flawed and not consistent with the statute. By calculating the MACT floors on a pollutant-by-pollutant basis, EPA cherry picks the best data in setting each standard without regard for the sources supplying the data. This results in HAP-specific standards that reflect the performance of a hypothetical source and are not achievable simultaneously by any source in the subcategory. This is particularly evident with the floors for the Gas 2 subcategory.

While the BMW unit was used to set the proposed floors for PM, Hg, and D/F, the BMW unit cannot meet the CO or HCl limits. Thus, EPA's proposed floor approach conflicts with the requirement in the CAA that section 112(d) standards reflect the overall performance of "sources" and amounts to an absurd result that conflicts with Congress' intent. The statute includes express limitations on EPA's ability to analyze units and sources for purposes of setting standards under section 112 and that authority does not allow EPA to distinguish units and sources by individual pollutant. As noted above, section 112(d)(1) only allows EPA to

distinguish among classes, types, and sizes of sources but is silent with regard to a pollutant-specific approach as used by EPA here. Furthermore, EPA also has failed to show that the proposed standards for “other gases” reflect performance of any actual affected sources. Such failure amounts to EPA’s proposed limits for Gas 2 units as being arbitrary and capricious.

The D.C. Circuit has made it abundantly clear from recent MACT rulings that the words of the CAA should be given their literal meaning. Undoubtedly, the D.C. Circuit sees section 112 as speaking with unambiguous clarity. The Act instructs EPA to set the MACT “floor” for existing sources in categories or subcategories with 30 or more sources at the “average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emissions information)” In the proposed rule, EPA interprets this provision as requiring the MACT floor to be calculated using data from the top 12% of sources for which actual emissions testing data are available. This is an overly narrow and impermissible approach because it violates the unambiguous statutory obligation to calculate the floor using data from the top 12% of sources for which any “emissions information” is available.

This problem is further exacerbated by the fact that the bulk of the information on which EPA has relied in developing the proposed emission limits for the various subcategories (including Gas 2) was collected using the ICR process that required testing for specified units for certain pollutants. The record reveals that EPA intentionally directed the information request to units that it had reason to believe were the better performing units in each subcategory. Thus, EPA intentionally gathered data on the best performers, and then determined the top 12% of performers from among this select group of the best sources. As a result, the proposed emission limits are inordinately stringent and not representative of the subcategories because the proposed standards are intentionally based on data from the “best of the best.” This approach to standard setting is arbitrary, capricious, and not in accordance with the law.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Britt S. Fleming

Commenter Affiliation: Auto Goup

Document Control Number: EPA-HQ-OAR-2006-0790-1916.1

Comment Excerpt Number: 14

Comment: There are plenty of industrial boilers and process heaters for which EPA does not have emissions testing data (including those using landfill gas); however, the agency has at least some “emissions information” from virtually all sources in the category. For example, EPA knows or can reasonably ascertain the types of fuels and emissions controls used by the vast majority of industrial boilers and process heaters in use today. EPA easily can get emissions information from boiler/process heater manufacturers along with the number of units produced. Manufacturers may not have emissions data for every single one of the pollutants covered by the proposed standard; however, manufacturers typically have emission estimate information for PM

and CO, which are commonly used during the permitting review process. This is “emissions information” that is impermissibly disregarded in selecting the group of sources that represent the top 12% of performers. In other words, the term “emissions information” unambiguously encompasses any information related to emissions – not just emissions rate information from performance testing or emissions monitoring devices.

Because at least some “emissions information” is available for virtually all sources in the category, EPA must calculate the MACT floor based on data from the best performing 12% of all sources in the category and not just on a select few. For example, the preamble indicates that there are 199 sources in the other gas subcategory, that PM emissions testing data are available for only 13 of these sources (or 6.5% of the entire population of these sources), and therefore that the MACT floor for PM for this subcategory must be based on the testing data from the top 2 sources (12% of 13 or 1% of 199). When setting the setting the floor for Hg, however, the preamble shows that EPA only relied on the data from a single unit (12% of 8 or 0.5% of 199). This approach is contrary to what the statute requires for existing sources, and in the case of Hg, HCl, and D/F, results in what equates to a new source MACT level for existing sources which is contrary to the statute. Because 12% of 199 is roughly 24, and EPA has (or could reasonably obtain) some emissions information from all sources in the category, each MACT floor should be based on the “average” emissions limitation achieved by the best performing 24 sources. This ensures that the floors for existing sources are at least consistent with what Congress intended and reflect more than just one or two sources for which EPA has test data.

While increasing the number of units in each floor would resolve some of the problems with EPA’s floor-setting approach, it does not address the fundamental testing and data challenges noted above with regard to landfill gas units. For these units, EPA should impose section 112(h) work practices given that the statutory criteria have been met.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Arthur N. Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management, NESCAUM

Document Control Number: EPA-HQ-OAR-2006-0790-2137.1

Comment Excerpt Number: 10

Comment: NESCAUM has concerns regarding the elimination of CO limits for all refinery gas-fired boilers due to potential aldehyde emissions from this source category. NESCAUM recommends that EPA set CO emission limits for refinery gas boilers and process heaters larger than

10 mmBtu/hr. Furthermore, NESCAUM also recommends that EPA require an annual tune-up for all natural gas boilers, refinery gas-fired boilers, and process heaters.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: J. Michael Geers

Commenter Affiliation: Duke Energy

Document Control Number: EPA-HQ-OAR-2006-0790-1861.1

Comment Excerpt Number: 9

Comment: In Section III (L) (32035) EPA solicits comment on its proposed emission averaging proposal. Specifically EPA requested comments on the appropriateness of using a discount factor and whether ten percent is an appropriate value for a discount factor. Duke Energy opposes the use of a discount factor and urges EPA to not include one in the final rule. As a first point, EPA's averaging formula is constructed so that even without a discount factor, the average emissions by a group of units will be no more than what is permitted on an individual basis. Second, Duke Energy is concerned that EPA's proposed IB MACT standards are so low that there are real questions about whether sources can even comply with them while using state-of-the-art control equipment. The net effect is that rather than having a real chance at continued operation, many sources will have no reasonable alternative but to shut down. Third, even if a source can attain the standard, facilities have to operate their units at a level somewhat below a standard so as to ensure an adequate compliance margin. Sources maintain this margin so as to avoid the repercussions of violating an applicable permit limit. A reasonable averaging program can help a group of sources maintain a standard and improves overall compliance. Under EPA's proposal, however, units that normally would be in full compliance with the standard would be in violation just because they attempted to use the averaging program. As an example, a group of units that are all nine percent below the emission standards would be deemed to be in full compliance as individual units. But if a company had elected to place the same units in an averaging program, they would all be judged out of compliance because of the ten percent discount factor. Finally, the choice of 10% appears purely arbitrary and without a specific justification. Another onerous provisions in EPA's proposed averaging program include the required detailed averaging plan a facility would need to prepare and the cap on unit emissions would not allow any unit participating in the averaging plan to have emission any higher than it had on the effective date of the proposed rule. These too appear to be arbitrary requirements. If EPA is serious about providing operational flexibility to facilities, then it must make substantial revisions to its proposed averaging provisions, including the elimination of the 10% discount factor and unit-level emission caps at historical levels.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Michael A. Livermore

Commenter Affiliation: Institute for Policy Integrity New York University School of Law

Document Control Number: EPA-HQ-OAR-2006-0790-1899.1

Comment Excerpt Number: 10

Comment: For the Major Source Rule, EPA is proposing to allow emissions averaging within a regulated source over its existing individual boilers in the same category. This is being proposed as a flexibility mechanism because emissions reductions may be cheaper at a particular unit. This proposal is subject to several conditions including an “emissions averaging plan” and a cap on the overall emissions level. [Footnote: 75 Fed. Reg. at 32,034-35.] In addition to these other safeguards, EPA is proposing a discount factor of ten percent to “ensure that averaging will be at least as stringent.” [Footnote: 75 Fed. Reg. at 32,035.] The agency is requesting comment on “use of a discount factor and whether ten percent is the appropriate discount factor.” [Footnote: 75 Fed. Reg. at 32,035.]

While the practical effect of this is not clear from the preamble, it is possible to discern its impact from the proposed regulatory language. Section 63.7522(d) of the proposed rule states that the “The averaged emissions rate from the existing boilers and process heaters participating in the emissions averaging option must be in compliance with the limits in Table 2 [emissions limits for existing sources] to this subpart at all times following the compliance date. . . .” [Footnote: 75 Fed. Reg. at 32,035.]

Section 63.7522(e) then gives two alternative formulas to demonstrate initial compliance. According to these formulas, the average emissions rate used to determine compliance is only 90% of the actual weighted average emissions rate (in this case, weighted by the maximum rated heat input capacity). Subsequent to this, each entity must demonstrate compliance on a monthly basis according the formulas laid out in Section 63.7522(f). [Footnote: 75 Fed. Reg. at 32,034-35.] Similarly to the formulas for initial compliance, the average emissions rate here is also only 90% of the actual weighted average emissions rate (weighted here by actual heat input).

These formulas appear to be mistaken and, instead of multiplying by 0.9, they should be multiplying by 1.1 (or dividing by 0.9). To see the error in the formulas, the simplest case can be considered. If there are two boilers at the same facility with identical heat input capacity and actual monthly heat input, then instead of a weighted average the formulas reduce to a simple average. Thus, if both actual emission rates for a given pollutant are 1, then the simple average emission rate is 1. This figure is then multiplied by 90%, giving an emissions rate of 0.9 for the purposes of regulatory compliance. Obviously, the result of the formula is a lower emissions rate than the actual correct weighted average. This seems directly contrary to the stated purpose of the discounting provision and should be fixed by EPA.

If the formulas are corrected to be in accord with the stated purpose of the discounting provision, there will be several effects from discounting. By penalizing averaging, it disincentivizes sources from using this option. This will lead to fewer cost savings, which is the goal of allowing averaging in the first place. However, averaging may lead to fewer reductions in emissions and thus fewer benefits to the general public. The net effect of this is ultimately an empirical one. If the agency is under-regulating (as seems likely, see *supra* pp. 8-9), then the decrease in emissions reductions is unwarranted and not worth the reduced costs. However, if the standards are set

efficiently (as we argue they should be), this should be unnecessary unless it is motivated by other concerns (such as measurement error).

EPA should have an independent justification for any discounting provision that explains why it should be implemented and not just what its effects are. It is impossible to determine what the proper discount factor should be without knowing the provision's purpose. The justification of ensuring stringency could equally well justify a discount factor of 5%, 10%, or 20%.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: J. Michael Geers

Commenter Affiliation: Duke Energy

Document Control Number: EPA-HQ-OAR-2006-0790-1861.1

Comment Excerpt Number: 25

Comment: Duke Energy remains concerned about the ability of small businesses to comply with the proposed standards within three years. EPA identified a variety of small businesses that will have to comply with the new rule, many of which will face substantial compliance costs. The proposal 75 FR 32045, EPA identified a number of mechanisms such as work practice standards, subcategorization, health based compliance options, and emissions averaging that it explains will lessen the burden on small businesses. Never the less Duke Energy believes that despite these attempts to lessen the financial impacts on small businesses, the ultimate cost to comply with Subpart DDDDD will be enormous. They are certainly "significant" within the meaning of the Regulatory Flexibility Act. The monetary impact on small businesses will be substantial enough to strain their financial well being. The present sluggish economy simply does not provide the financial resources for many of these small companies to take on the additional costs of retrofits to meet the proposed MACT standards in three years. More time and more flexibility are needed.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Edward J. Wilusz

Commenter Affiliation: Wisconsin Paper Council

Document Control Number: EPA-HQ-OAR-2006-0790-2133

Comment Excerpt Number: 1

Comment: EPA should establish health based emissions limitations for acid gases and manganese under § 112(d)(4).

Section 112(d)(4) authorizes EPA to set health-based emissions limitations when establishing standards for HAPs under § 112(d). Section 112(d)(4) is a powerful tool that enables EPA to match the stringency of a HAP emissions limitation to the level determined necessary to fully protect human health. As a result, the standard is no more stringent and no less stringent than needed to get the job done.

The default technology-based method of setting MACT standards is a cookie cutter approach that can and does result in HAP emissions limitations that go well beyond what is needed to protect the public from HAP emissions. The clear purpose of § 112(d)(4) is to prevent this from happening. The legislative history of § 112(d)(4) is abundantly clear on this point. In formulating § 112(d)(4), Congress recognized that, “For some pollutants a MACT emissions limitation may be far more stringent than is necessary to protect public health and the environment.” [Footnote: S. Rep. No. 101-128 (1990) at 171]. As a result, § 112(d)(4) was provided as an alternative standard setting mechanism for HAPs “where health thresholds are well-established ... and the pollutant presents no risk of other adverse health effects, including cancer....”

When the first Industrial Boiler MACT was promulgated in 2004, it included health based emissions limitations for two HAPs – hydrogen chloride (“HCl”) and manganese. These health-based emissions limitations were rigorous standards that demanded accountability. They were a winner for the Agency and the public because public health would have been protected with an ample margin of safety. At the same time these standards were a winner for affected sources because the standards would not have blindly required emissions to be reduced far below the levels needed to assure that the public was protected. It was estimated at the time that these health based standards would have saved over \$2 billion in compliance costs, as compared to the technology-based standards that otherwise would have applied.

In the newly proposed Industrial Boiler MACT, EPA acknowledges its authority under § 112(d)(4) to establish a health-based emissions limitation for threshold pollutants in lieu of a MACT emissions limitation. However, the Agency proposes not to establish any health based emissions limitations “[g]iven the limitations of the currently available information (i.e., the HAP mix where boilers are located, and the cumulative health impacts from co-located sources), the environmental effects of HCl, and the significant co-benefits of setting a conventional MACT standard for HCl.” Nevertheless, EPA asks for comment on a wide range of issues related to the justification for setting health based emissions limitations and the method by which they should be set.

Ample scientific information supports a determination that HCl, hydrogen fluoride, hydrogen cyanide, and manganese are threshold pollutants and, thus, are eligible to be regulated under § 112(d)(4). In addition, the Agency has the technical tools and significant factual support for establishing health based emissions limitations for these HAPs that would provide the requisite ample margin of safety to health and the environment. Thus, health based emissions limitations are fully justified on scientific and technical grounds. EPA should set health based emission limitations for HAP acid gases and, like in the 2004 rule, a health based emissions limit for manganese, which should be implemented in conjunction with a Total Select Metal (“TSM”) standard (where the TSM standard would be an alternative to the PM surrogate, and where a

“TSM less manganese” option would be provided when a source elects to comply with the health based compliance alternative for manganese).

From a legal standpoint, the statute makes clear that criteria pollutant co-benefits associated with the proposed MACT standards may not be considered in deciding whether to establish § 112(d)(4) health based emissions limitations. Also, EPA has failed to explain why the health based emissions limitations it established in the 2004 Industrial Boiler MACT and the justification provided for those limitations should now be reversed. The preamble to the newly proposed rule sets out a number of questions that might be relevant in deciding whether to establish health based emissions limitations, but merely asking questions is not a sufficient basis for reversing prior determinations adopted through notice and comment rulemaking. Thus, EPA’s proposal not to set health based emissions limitations runs counter to the law and is based on an inadequate explanation of why the Agency proposes to depart from its prior approach.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Gary Melow

Commenter Affiliation: Michigan Biomass

Document Control Number: EPA-HQ-OAR-2006-0790-1956.1

Comment Excerpt Number: 1

Comment: EPA should provide additional clarification to the definition of “electric utility steam generating unit” (75 FR at page 32064). The definition of electric utility steam generating unit refers to a fossil fuel fired combustion unit of more than 25 MW that serves a generator that produces electricity for sale. The Acid Rain Rules and Clean Air Interstate Rules (CAIR) also have definitions of this term, but there are some differences and exemptions that apply. Therefore we are requesting additional clarification to the definition of “fossil fuel fired combustion unit.” Our biomass boilers use fossil fuel (natural gas) for startup purposes and are limited by permit to less than 10% annual capacity factor of natural gas. Actual natural gas capacity factor runs less than 1% per year. We have units serving a generator that produces greater than 25 MW electricity for sale. Natural gas is not used to generate electricity, it is used as a startup fuel. Is a unit that generates over 25 MW of electricity for sale that fires primarily biomass fuels (and meets the definition of major source of HAP) subject to this rule or the future utility rule?

EPA requests comment on whether a boiler that is firing solid waste (a “heat recovery unit” under CISWI) could opt back into the boiler regulations by taking a federally enforceable permit restriction that would prohibit future combustion of solid waste material (75 FR at 32011). Michigan Biomass supports such a concept.

There are still uncertainties in the Identification of Non-Hazardous Secondary Materials That Are Solid Waste, (75 Federal Register 31844, June 4, 2010) proposed rule (“NHSM rule”). This

rule also contains a petition process and allows for case-by-case determinations. Until the NHSM rule is finalized, we cannot determine which rule our sources will be subject to. If we cannot determine which rule applies to us, we don't believe that EPA can with confidence determine which sources are subject to which rule. Because the population of sources affects the determination of appropriate emission limitations, we believe that this proposed boiler MACT rule cannot be finalized until well after the NHSM rule is finalized.

EPA has postulated a second set of emission limitations should the "alternative approach" under the NHSM rule be used. This alternative approach would expand the definition of solid waste and thus, by EPA estimates, 290 sources currently considered boilers would be moved to the CISWI category. As shown in Table 8 (75 FR at 32036), the proposed MACT floor would increase in almost all cases when the potential CISWI units are removed. Some of the increases would be quite substantial. (We assume the 10,560 PPM CO reference for fluidized bed boilers is a typographical error.) The fact that the removal of the potential CISWI units from the MACT floor determination results in an increase in the MACT floor for the remaining boilers must mean that the potential CISWI units have lower emissions than traditional boilers. This actually supports our assertion that these units should not be regulated under the CISWI rule - their emissions are not of greater concern than emissions from boilers firing traditional fuels. Thus, they do not warrant being regulated under a rule that is so stringent that it will cause the affected units to shut down or stop using the secondary material, and cause no new units to be built (see discussion 75 FR at 31966).

Concern with emission limits: We are aware that other organizations have examined the database used to develop the MACT floor limits and we have not duplicated that effort. Similar to CISWI, it appears that EPA has used statistical analyses with a dataset in a vacuum, without putting them into context to see if they make any sense. A quick overview of the emission limits yields the following questions:

- Why are dioxin/furan limits much more stringent for stoker biomass boilers than other types of biomass combustion? The difference in the limits for new sources is 2 to 3 orders of magnitude between stoker-fired boiler and other biomass combustion types. For example, the dioxin/furan emission limit for a new fluidized bed biomass boiler is 140 times higher than the dioxin/furan emission limit for a new stoker boiler, while the difference is a factor of 5 for existing units. This lacks rationale because there is no reason a fluidized bed biomass boiler would emit such different amounts of dioxin/furan from a similar fueled stoker boiler. If dioxin and furans are related to good combustion, as indicated by CO, and fluidized bed boilers have lower CO emissions, the contrary comparison to dioxin/furan emission raises questions. The proposed CO limitation of 40 PPMVD (at 3% O₂) for new fluidized bed boilers is well under what vendors will guarantee. (This is equal to approximately 0.04 lb/MMBtu.) A project cannot be financed unless equipment vendors can offer assurance that a capital investment will result in compliance with the environmental regulations. All proposed emission limitations need be achievable within equipment vendors guarantees, and through review of Best Available Control (BACT) and Lowest Achievable Emission Rate (LAER) determinations; 112(g) determinations may give an idea of where those levels are. A recent review indicates that these levels are in the 0.075 to 0.17 lb/MMBtu range or more, depending on the type of biomass being fired (moisture content). Another example is the proposed coal particulate matter (PM) limit of 0.001 lb/MMBtu. While

this emission limit does not affect our units, clearly this is well below what can be guaranteed for even the most advanced PM control devices.

- For CO there should be an allowance for emission limits corrected to CO₂ as an alternative to O₂. Some facility's CEMs are now using CO₂ as the diluent instead of O₂. The trend is that more and more sources are converting to CO₂ diluent when upgrading their CEMs due to other regulations, such as the Greenhouse Gas Reporting Rule.

We are also concerned about EPA establishing emission limits based on stack tests, particularly for variable emissions such as CO. EPA indicated that a limited number of facilities used 30 days of CEMs data to further support the MACT floor determination. This is not sufficient. We have operated with CO CEMS for literally decades and the difference in emissions for our facilities are marked over an annual time period. There are seasonal differences in biomass that affect CO emissions, with winter conditions in cold climates typically producing significantly higher CO emissions in comparison to the drier summer months.

Additionally, EPA should take into account the large difference in emissions of CO as a result of fuel moisture. Data evaluated from sources firing wood with a lower moisture content should not be included in establishing a limit for sources that fire green wood that may have a moisture content of 50% at certain times of the year. Similarly, EPA should not use data from boilers firing a mixture of other fuels such as natural gas in combination with biomass to set standards for units firing 100% biomass because the emission profiles are different.

In our case, there are some secondary materials that have been used as a supplemental fuel that improve combustion conditions (e.g., TDF) and help control CO emissions. Since our TDF has wire in it, it may be defined as solid waste under the proposed NHSM rule. If so, it is feasible that a source could choose not to fire TDF. This would result in higher CO emissions than what has been reported to the EPA.

EPA should reinstate the risk assessment option for HCL and manganese. In the original boiler MACT rule, EPA offered a risk assessment option for sources that could demonstrate acceptable ambient impacts of HCL or manganese in lieu of complying with an emission limit. We urge EPA to reinstate this option for the proposed Boiler MACT Rule. Biomass boilers are typically located in rural areas, so concerns with multiple sources of exposure in heavy industrial areas discussed on pages 32031 to 32032 is not a concern for our sources.

EPA has not adequately accounted for startup and shutdown. EPA has mandated that the proposed emission standards apply at all times, including startup and shutdown. EPA reasons (75 FR at 32012-32013) that the daily or monthly averages take these episodes into account. There appears to be a mathematical problem in using concentration levels corrected to an O₂ level under startup conditions. Elevated O₂ levels seen during startup result in highly inflated PPM values (we refer to this as "data blowup") that cannot be compensated for in a longer averaging time. For example, in the first hour of startup when the O₂ levels are near ambient levels, the O₂ correction calculations provided for in Method 19 of 40 CFR 60 Appendix B yield invalid numbers. If the O₂ monitor reads 20.9% (common for the first hour in startup), the emissions in corrected PPM is equal to infinity. If the O₂ monitor reads 21% at the beginning of a startup (possible, given the accuracy of the instrument) the corrected PPM value will be a huge negative

number. The excessively high PPM corrected values will continue for the first couple hours of startup and it will take up to 10 hours before the O₂ level reaches a level close to 7%, at which point the mathematical “penalty” will stop. The same can occur in a shutdown, although for a shorter amount of time. These very high corrected values occur even when actual emissions are quite small. No averaging time will compensate for the extremely high values seen when using a concentration corrected to a given percentage of O₂ during this time. We have corrected our operating permits in all cases that eliminates the use of a PPM corrected value (or a lb/MMBtu value, which in Method 19 carries the same mathematical problem see equations 19-1 to 19-3) during startup or shutdown conditions. We instead rely on mass emission rate values, which is practical on a unit-by-unit basis considering actual size.

Attachment A is a table that demonstrates this phenomenon with an arbitrary CO level of 20 PPM raw under various O₂ conditions.

While this issue may be “hidden” for compounds that are stack tested (assuming stack tests never occur during startup or shutdown), this issue is very obvious for pollutants that are continuously monitored. Even with a 30-day averaging period, the monthly CO average PPM values would be affected by including startup and shutdown events on a PPM corrected basis.

Additionally, we have a concern that if a standard includes startup and shutdown events, an agency could require stack testing during startup and shutdown events to ensure compliance under worst-case operating conditions.

We are concerned that the Energy Assessment Requirement is too broad. We are also concerned about the number of facilities affected by this rule, and the practical ability to have this assessment done at all facilities in the timeframe specified. We understand the benefits of running an efficient operation and the need to use energy resources wisely, but believe the economics of running these facilities is the driving force behind efficiencies. The fuel these facilities purchase is the largest operating expense at these facilities and their profitability relies on the efficient use of that energy source. Conducting costly assessments simply to provide efficiency data provides no direct benefit to the facility, the EPA or the environment.

Dioxin/furan limits: We request that EPA consider work practice standards in lieu of dioxin/furan limits on biomass boilers. We have data available that indicates that dioxin/furan emissions are minimal. EPA has stated that “combustion control is most effective in reducing dioxin, furan, other organic pollutants, PM, NO_x and CO emissions.” (Preamble to proposed CISWI rules, 75 FR at 31942.) We believe that the CO emission limitations assure good combustion practices which in turn assure minimal dioxin/furan emissions. Dioxin/furan testing is very expensive. If a dioxin/furan limit is required, then we prefer the TEQ approach, as this has been the means to establish toxicity of the emissions. We do not see added value in having TEQ and total measures since with the TEQ approach is the most accurate in measuring health effects of the emissions.

Fuel testing: A biomass facility would typically use the continuous compliance option for mercury and hydrogen chloride based on the mercury and chlorine content of fuel. This is due to the fact that most biomass boilers are equipped with ESPs for particulate control and do not

employ carbon injection due to minimal mercury emissions, nor are scrubbers typically used for HCL control.

We note that mercury is sometimes not detectable in our biomass fuel and in that case it would not be straightforward to establish a maximum mercury content of the fuel. We would propose using the detection level as the assumed level of mercury in the fuel.

We understand from the proposed rule that we must establish a maximum mercury and chlorine content of the fuel during the performance stack test, and maintain levels of chlorine and mercury at or below those levels to assure continuous compliance. If a fuel with a higher mercury or chlorine content were to be considered we assume there is a provision for running this fuel and conducting stack testing to confirm continued compliance. If such a stack test indicates emissions in excess of the emission limit, then the previous mercury or chlorine content that demonstrated compliance with the emission limit applies. EPA must appreciate that there may be several “trial and error” type runs with emission testing to establish the maximum acceptable chlorine and mercury content, and some of this testing may need to take place after the compliance deadline if other fuel types were to become available in the future.

We also read the proposed rule that we can use periodic stack testing for HCL and mercury for compliance demonstration, and are not required to use the methods described in 63.7530(c)(3) Equation 10 and 11. The formulation in this section assumes all chlorine in the fuel is converted to HCL and all mercury in the fuel is emitted, which is not the case for our sources.

We request that EPA confirm our understanding as the language in 63.7530 (75 FR pages 32056 to 32058) is somewhat confusing. 63.7530(b) states that in addition to stack testing and establishment of site specific operating limits, you must also conduct fuel analyses according to 63.7521 and establish maximum fuel pollutant input levels according to paragraphs (c)(1) through (c)(3), as applicable. Equation 10 and 11 assumes all chlorine is converted to HCL and all mercury is emitted is under section (c)(3) of this section.

Recordkeeping of fuels/solid waste. EPA proposes to require daily records of fuel types burned to demonstrate that no solid waste has been fired (75 FR at 32015). This is a burdensome requirement. Fuel specifications are established to ensure each supplier provides the correct type and quality of the fuel.

Particulate Matter CEMS: We have traditionally monitored opacity continuously from our sources, and also have malfunction abatement plans and compliance assurance monitoring (CAM) requirements for particulate matter. The capital cost of PM CEM equipment, which EPA estimates at \$88,000, plus annual operating cost of \$33,000 is very high given the number of units affected. These costs are not justified given the existing monitoring requirements and the consistent operation of particulate removal devices. (For biomass units these are predominantly high efficiency ESPs). This cost is substantial and provides no reduction in emissions.

Costs of standard are underestimated. We are aware that other organizations are reviewing in detail the cost benefit calculations used in the proposal and we have not repeated that effort. However, similar to the MACT floor development for the emission limits, there are obvious

issues that appear with only a cursory review of the information provided on the cost-benefit of the rule.

As shown in Tables 10 and 11 (75 FR at 32037 and 32038), EPA has estimated the cost of compliance and the environmental benefits for new biomass units and coal units to be zero as listed in Table 11. This implies EPA does not believe there will be any new major biomass or coal plants built or reconstructed. We are aware of several biomass power plants in the development phase, which may or may not be major HAP sources. Certainly, even smaller biomass boiler projects may occur at existing major HAP sources. Federal energy policy encourages the use of renewable energy and several studies show biomass being a significant portion of new renewable energy sources. Therefore the costs cannot be zero going forward, and neither can the environmental benefits of biomass, which include emission offsets from fossil fuels, including greenhouse gases.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Michael T. Palko

Commenter Affiliation: Pennsylvania Department of Conservation and Natural Resources

Document Control Number: EPA-HQ-OAR-2006-0790-1895.1

Comment Excerpt Number: 4

Comment: Table 1 compares the former (now vacated) Maximum Achievable Control Technology (MACT) standards to the EPA-proposed MACT standards for new and existing boilers at major source facilities. [See submittal for Table 1.] The American Forest and Paper Association provided testimony on these new standards in a public information session in June held in Washington, DC.

Based on AF&PA's review of these new major source standards, their representatives stated that "In fact, there are almost 2000 boilers across the forest products sector, and they use a wide variety of fuels and secondary materials, including an ever-increasing amount of carbon-neutral biomass, which currently provides 65% of our energy needs, and that number is rising steadily. Unfortunately, EPA's proposed rules will create serious disincentives for the use of biomass and thereby increase use of fossil fuels which we believe is counterproductive and contrary to the President's own energy policy. "

Further industry representatives stated that "We believe EPA has significant discretion in the MACT program to protect public health while avoiding the unnecessary burdens these proposed regulations could impose. Boiler MACT alone could cost the forest products industry alone over \$6 billion in capital expenditures and hundreds of millions more in annual costs unless significant changes are made.

It is certain that these rules indicate that additional investments will need to be made in emissions controls and fuel testing. This may discourage additional use of woody biomass energy by the forest products sector which increases their costs and reduces their competitiveness in international markets. Such impacts will result in economic impacts throughout the value chain related to the forest products industry.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: David P. Tenny

Commenter Affiliation: National Alliance of Forest Owners

Document Control Number: EPA-HQ-OAR-2006-0790-1884.1

Comment Excerpt Number: 5

Comment: For example, EPA's faulty MACT floor approach resulted in extremely low limits for HCl (as a surrogate for acid gases) for biomass boilers. As a result, under the proposed rule, biomass boilers would be required to make major technological adjustments to control for HCl with extremely little benefit to public health or the environment. In addition, there are no EPA-approved methods that are appropriate in measuring the proposed HCl limits. See Attachment 1, Letter from Kerry R. Flick, Metso Power, to Donna Harman, America Forest & Paper Association at 4 (Aug. 13, 2010). [See submittal for Attachment 1.]

The control technology for dioxin/furan is also not well understood and may not be available to meet the limits set forth in the proposed rule. The limitations for dioxin/furan are also arbitrary and capricious because these pollutants are not reliably detectable at the proposed regulatory level. As a result, the available methods of demonstrating compliance can not readily distinguish compliant boilers from noncompliant boilers. For example, the ability of tests to detect dioxin/furan at such low levels are so variable, that even boilers that are below the detection levels. may still exceed the proposed emissions limitations. In addition, with levels set so low, the risk of sample contamination is extremely high; for example, "one person smoking a cigarette in the vicinity of a test program could contaminate the sample with enough dioxin to put the facility out of compliance." Attachment 1 at 5 [See submittal for Attachment 1.] Imposing emissions limitations in this situation would be unreasonable.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: David P. Tenny

Commenter Affiliation: National Alliance of Forest Owners

Document Control Number: EPA-HQ-OAR-2006-0790-1884.1

Comment Excerpt Number: 10

Comment: NAFO further believes that EPA should exercise its authority under CAA §112(d)(4) to establish a health-based emissions limitation for HCl and manganese. This approach would ensure that public health is protected while eliminating the extreme cost to industry that could result from the proposed MACT emissions limitations.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Edward J. Wilusz

Commenter Affiliation: Wisconsin Paper Council

Document Control Number: EPA-HQ-OAR-2006-0790-2133

Comment Excerpt Number: 15

Comment: We also note that there is very little difference between the emissions from the top performing sources in the Gas 2 subcategory as compared with the Gas 1 subcategory. As a result, EPA would be justified in concluding that the Gas 1 and Gas 2 subcategories should be combined into a single gas-fired subcategory, which would be regulated by work practice standards for the reasons EPA explains in the preamble. At a minimum, units fired with process gases generated in chemical plants, pulp and paper plants, and similar operations should be included in the Gas 1 subcategory because the emissions data show very little difference in performance between units at these facilities and Gas 1 units.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Edward J. Wilusz

Commenter Affiliation: Wisconsin Paper Council

Document Control Number: EPA-HQ-OAR-2006-0790-2133

Comment Excerpt Number: 16

Comment: In any event, a work practice standard should be adopted for dioxins/furans. The proposed dioxin/furan emission standards for biomass boilers are so low and the detection limits of dioxin and furan isomers are so variable that many boilers are likely to exceed the proposed emission limits for dioxin/furans even though the tests show that all the isomers are present below the detection limits. Thus, imposing a dioxin/furan emissions limitation on biomass boilers would be arbitrary and capricious because the method of demonstrating compliance would not reliably distinguish compliant boilers from noncompliant boilers.

In this situation, EPA has ample authority to prescribe a work practice standard instead of a numeric emissions limit. Section 112(h)(2)(B) authorizes EPA to establish work practice standards when “the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations.” Such is the case for the proposed dioxin/furan standard for biomass boilers – the proximity of the standard to the detection limit makes testing for compliance not technologically practicable, while the inability to accurately measure at the level of the proposed standard is economically impracticable because spending more money on the prescribed method will not resolve the inherent problem of setting the standard at the method detection limit. A work practice standard requiring good combustion practices is justified in this situation and would assure that dioxin/furan emissions are minimized.

In any event, the 112 HAP list includes only the named compounds dibenzofuran and 1,3,7, 8 TCDD. Therefore, if EPA decides to adopt numeric standards, the standards must be specific to these compounds. EPA has no authority to regulate under 112 the generic chemical categories of “dioxins” and “furans.”

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1944.1

Comment Excerpt Number: 2

Comment: In the mid-1990's Detroit received several contracts for biomass systems in Western Europe. The Europeans already had regulations that required low CO values. The simple reason was that the biomass was most often construction & demolition fuels, therefore having metals, nitrogen and chlorine contents above typical hogged wood and bark. The low CO permit values were being used as a surrogate for dioxins and furans. To achieve these low CO values these boilers were designed on the concept of waste to energy facilities. These European units are very conservative in size and have long residence times and low furnace velocities. Table B represents current design parameters extrapolated to the typical North American 45-50% moisture hogged wood and bark fired units. [See submittal for table B.]

We have provided the above CO values based on experiences of operating units; you will find that these values are below the proposed MACT rule of 560 ppm @3%. However, these values do not cover the full range of biomass fuels now being used. This is simply because the fuel sources are becoming more difficult to obtain. Smaller units are often more susceptible to inconsistencies of CO than large units (+180 Klbs steam/hr), Fly carbon recovery is required to improve overall boiler efficiency and reduce land filled fly ash. Overall, each potential project is reviewed on its own information and required performance.

The proposed MACT CO value for biomass would first appear reasonable for a broad range of existing and new biomass boilers. However, the very low dioxin and furan values are felt to be unobtainable without some post combustion system (carbon injection, SCR, etc). There is little or no evidence that extremely low CO values correlate to a similar reduction of VOC's and D/F at the levels proposed in the MACT rule, Further to this, we can only imagine that ESP's will have to be replaced by fabric filters, wet ESP or wet scrubbers.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Robert Klemans

Commenter Affiliation: Florida Electric Power Coordinating Group

Document Control Number: EPA-HQ-OAR-2006-0790-1955.1

Comment Excerpt Number: 7

Comment: The proposed biomass emission limits are exceedingly low because of errors in standard-setting as noted in the items above. In addition, the PM limit for biomass units does not account for fuel-related variability. PM emissions are directly related to the ash content of a fuel and the ash content of unadulterated wood is highly variable. Similarly, EPA does not appear to have made any fuel-related adjustments for chlorides or mercury in biomass. CO emission limitations may be unachievable due to limited post control technologies especially if startup and shutdown events are included in the emissions averaging.

Strong policy reasons for promoting the combustion of biomass coupled with difficulty in complying with the unrealistically and unjustifiably stringent proposed HAP emission limits for biomass boilers suggest that EPA prescribe work practice standards for biomass boilers instead.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Bill Thomas

Commenter Affiliation: Shuqualak Lumber Company

Document Control Number: EPA-HQ-OAR-2006-0790-1948.1

Comment Excerpt Number: 9

Comment: It is our understanding that there are no sources, including those that are in the top 12% for a pollutant, in EPA's database of boilers that could meet all of the currently-proposed Boiler MACT standards. This is very disconcerting and implies that the current limits may be impossible to meet. We believe a more reasonable approach would be to establish the top performing sources for all five (5) pollutant categories simultaneously. This approach should be consistent with Clean Air Act criteria.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Gregory A. Wilkins

Commenter Affiliation: Marathon Petroleum Company, LLC

Document Control Number: EPA-HQ-OAR-2006-0790-2165.1

Comment Excerpt Number: 1

Comment: Marathon agrees that work practice standards for natural gas and refinery fuel gas fired equipment are more appropriate than specific numerical limitations. The Clean Air Act allows for work practice standards in MACT standards.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Alicia Oman

Commenter Affiliation: National Association of Manufacturers

Document Control Number: EPA-HQ-OAR-2006-0790-2234.1

Comment Excerpt Number: 1

Comment: EPA offers two proper and correct justifications for its selection of tune-ups as the MACT standard for the Gas 1 subcategory. Manufacturers agree with EPA's conclusion that the following two reasons justify the proposed work practice MACT standard:

First, EPA estimated that the cost of compliance with emission limits would be exorbitant – \$14 billion – because compliance would require the widespread installation of a system of combined fabric filter and wet scrubber technology. 75 Fed. Reg. 32025. Indeed, the database shows that no Gas 1 unit anywhere employs such technology.

Second, the exorbitant costs would create perverse results which could create more HAP emissions than would otherwise occur under the work practice standards or even under the status quo. For example, a company with a solid fuel-fired boiler might be deterred from switching to a natural gas-fired boiler; and a company with a natural gas-fired boiler might be encouraged to switch to a solid fuel-fired boiler in order to reduce compliance costs associated with numeric limits for Gas 1 boilers.

In addition, as discussed below, there are other compelling reasons why EPA's conclusion that annual tune-ups should be established as the MACT standard for existing and new boilers in the Gas 1 subcategory.

B. Numeric limits for Gas 1 boilers would violate the Clean Air Act as there is no available emission control technology to meet the potential numeric limits
As discussed in more detail in Section II.B, in establishing a numeric MACT standard,

EPA must be able to show that there is an emissions control device that is technologically available to all of the units in the subcategory and sufficient generally for them to achieve the identified emissions rate. If EPA cannot identify such a control measure, it may not translate the emissions rate into a standard, as that would then be interfering with fundamental choices about basic design of production equipment, which is beyond EPA's authority under the Clean Air Act.

For Gas 1 boilers, tune-ups are the only identifiable technologically feasible form of control, and hence constitute the de facto "floor." There are no control measures in the Gas 1 database that would allow the units in the subcategory to reach the emissions level of the lowest-emitter(s). To the contrary, the database shows that the primary explanation for the differences in emissions rates is the differentials in basic design characteristics of the Gas 1 units. In these circumstances, as discussed *infra* (Section II.B), EPA is not authorized to set the MACT standard in line with the emissions of the lowest emitters, as it cannot point to an in-use and effective emissions control technology across the subcategory. Thus, EPA must turn to section 112(d)(2), which calls for a search through the database for any effective form of control in significant actual usage. The only such control measure that can be discerned in the database is tune-ups. Thus, tune-ups constitute the de facto "floor" for existing and new units. [Footnote: Manufacturers agree with EPA's conclusion that the potential "beyond the floor" systems combining fabric filter and wet scrubber technology are not "achievable" because of the exorbitant cost and perverse incentives which EPA outlined in its proposal. Further, establishment of a single numerical standard is not technically feasible. The design characteristics of the units, and hence the emissions-reduction potentials of annual tune-ups, vary widely. Consequently, there is no single emission rate or even percentage of emission reduction that could be translated into a numerical limit.]

C. EPA has clear authority to set a work practice standard for Gas 1 units

EPA has ample legal authority to set the standard for Gas 1 units in terms of a work practice. First, section 112(d)(1) authorizes – if not requires – EPA to set "emission standards" for each category or subcategory, and section 302(k) defines "emission standard" to include work practice standards. Thus, if EPA determines that the best performing sources achieved their emissions performance through work practices rather than control equipment, those work practices should be identified as the "floor."

Section 112(h)(2)(b) independently authorizes EPA to use a work practice standard where, as here, the application of a system for measuring the effect of the control measure for enforcement purposes is not practicable. For gaseous fuel boilers, it is not practicable to measure emissions at the levels of EPA's proposed limits, as stack emissions of, for example, 1 ppm CO may be difficult to differentiate from environmental background levels.

EPA has independent authority to promulgate work practices as emission standards under CAA 302(k) as long as the work practices provide a continuous limit on emissions or are part of a set of regulations that provide a continuous limit on emissions. As required by CAA 112(d), EPA

must promulgate “emission standards” for the control of hazardous air pollutants at major sources. Originally, these “emission standards” were found to be limited to only numeric emission limits. See, e.g., *Adamo Wrecking Co. v. U.S.*, 434 U.S. 275 (1978). However, in the 1990 Amendments, Congress expanded the definition of “emission standards” in 302(k) to expressly include work practices:

The terms “emission limitation” and “emission standard” mean a requirement established by the State or the Administrator which limits the quantity, rate, or concentration of emissions of air pollutants on a continuous basis, including any requirement relating to the operation or maintenance of a source to assure continuous emission reduction, and any design, equipment, work practice or operational standard promulgated under this chapter.

(emphasis added).

The plain language of the Clean Air Act now authorizes the promulgation of work practices: (1) as direct emission standards under 302(k), and (2) in lieu of emission standards under CAA 112(h). While both of these sections authorize the implementation of “work practices,” they are distinct provisions that serve different roles. As noted in the legislative history of the 1977 amendments to the Clean Air Act, the key to an emission standard under CAA 302(k) is that it applies continuously:

By defining the terms “emission limitation,” “emission standard,” and “standard of performance,” the committee has made clear that constant or continuous means of reducing emissions must be used to meet these requirements. By the same token, intermittent or supplemental controls or other temporary, periodic, or limited systems of control would not be permitted as a final means of compliance.

H.R. Rep. 95-294, at 92 (1977), as reprinted in 1977 U.S.C.C.A.N. 1077, 1170. As interpreted by the D.C. Circuit in *Sierra Club v. EPA*, 551 F.3d 1019, 1027 (D.C. Cir. 2008), “[w]hen sections 112 and 302(k) are read together . . . Congress has required that there must be continuous section 112-compliant standards.” CAA 112(h), on the other hand, includes no requirement for continuous regulation, allowing that “a standard may be relaxed ‘if it is not feasible in the judgment of the Administrator to prescribe or enforce an emission standard for control of a [HAP].’” *Id.* at 1028 (quoting 42 U.S.C. 7412(h)(1)).

EPA can therefore comply with CAA 112(d) by either: (1) promulgating CAA § 112(d) emission standards that comply with the CAA requirement that “some section 112 standard apply continuously,” under which Congress “did not authorize the Administrator to relax emission standards on a temporal basis,” or (2) find that it is not feasible to prescribe or enforce a continuous emission standard under 112(d) and promulgate “work practice or operational standards instead” under 112(h). *Sierra Club*, 441 F.3d at 1028 (internal quotations omitted).

Moreover, this reading is consistent with CAA § 112(h)(4). That provision states, “[a]ny standard promulgated under paragraph (1) shall be promulgated in terms of an emission standard whenever it is feasible to promulgate and enforce a standard in such terms.” (Emphasis added). In light of the D.C. Circuit’s reasoning for distinguishing emission standards from 112(h) work

practices, this provision is best read to require that, where EPA finds a continuously applicable work practice is not feasible under CAA § 112(h), it must promulgate “temporary, periodic, or limited systems of control” that resemble a continuous emission standard to the maximum extent possible. H.R. Rep. 95-294, at 92 (1977). [Footnote: The D.C. Circuit’s decision in *Sierra Club v. EPA*, 479 F.3d 875 (D.C. Cir. 2007) does not impact EPA’s separate authority to issue direct work practice emissions standards as described in 302(k). Rather, that case focused on the breadth of EPA’s authority under CAA 112(h), and only held that section authorizes the establishment of work practices in lieu of an emission standard where “measuring emission levels is technologically or economically impracticable.” *Id.* at 884. That holding says nothing about EPA’s independent authority to establish work practices as direct emissions standards under CAA 112(d) and 302(k).]

That statutory authority greatly simplifies the development of work practice standards for natural gas fired units. Instead of turning to the alternate stop-gap provisions in 112(h) that apply when continuous emissions standards are not feasible, EPA can focus on the direct establishment of work practices that existing sources use to ensure continuous compliance under 112(d) and 302(k). For example, if the top 12% of existing natural gas-fired boilers are using tune-ups to achieve their “best performing” status, then EPA has the authority to establish that protocol as a work practice-based emission standard. Tune-ups are an appropriate emission standard for these units because, if conducted with adequate frequency, they provide continuous reduction of the quantity and rate of HAP emissions from boilers by ensuring that they operate properly.

EPA should similarly establish an annual tune-up work practice standard as the MACT standard for all other gas boilers

For the reasons discussed above, EPA should establish annual tune-up work practice as the MACT standard for all other gas boilers. Other gas boilers have the same characteristics as natural gas and refinery gas. Indeed, EPA has not identified and cannot identify any technologically feasible means of achieving the stringent proposed standards that apply to all of the units in the subcategories. As discussed *infra* (Section II.B), EPA is therefore required to turn to other methods of control, with tune-ups as the choice justified by EPA’s data. Further, many of the other gases are very similar in composition and combustion properties to the Gas 1 subcategory gasses, making a decision to have such dramatically different emission control regimes arbitrary and capricious. Finally, gaseous fuels are clean burning fuels with emissions that are lower than from other types of fuels. Just as EPA recognized that it should not be creating perverse incentives that force operators to turn away from clean Gas 1 fuels, 75 Fed. Reg. 32025, EPA should not create regulatory incentives for operators to turn away from other clean gaseous fuels. EPA should encourage the use of clean burning fuels by allowing work practices that give operating flexibility to maximize combustion efficiency and, thereby, minimize emissions.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: William R. Graves
Commenter Affiliation: Lawrenceburg Distillers Indiana, LLC
Document Control Number: EPA-HQ-OAR-2006-0790-2270
Comment Excerpt Number: 1

Comment: We currently operate a coal fired boiler that was built in 1978 with an electrostatic precipitator to capture particulate. This boiler allows us to compete competitively for alcohol contracts on the open market because of our lower energy costs. Under the first NESHAP proposal we could have remained compliant using the Health Based Standard and by continuing to purchase low sulfur, low mercury coal and using our electrostatic precipitator. With the proposed NESHAP we would have to add additional emission control equipment that is a cost that cannot be passed on to the consumer and still remain competitive. This leads me to question the reasoning behind lowering the limits without a proven reason. I have not seen where the EPA has proven that the limits for the emissions have been established on the best performing 12 percent of sources within the beverage alcohol industry who currently operate a coal fired boiler. Further more I have not seen where the lowering of these limits will improve the quality of the air and the health of the general public. For these reasons we request that you consider putting the current limits back to the original limits and reinstituting the Health Based Standard of the first NESHAP.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: C.A. Vandersteen
Commenter Affiliation: Louisiana Forestry Association
Document Control Number: EPA-HQ-OAR-2006-0790-2246
Comment Excerpt Number: 1

Comment: The LFA believes that the Boiler MACT rules alone could impose tens of billions of dollars in capital costs at the paper mills, lumber and plywood mills, and thousands of forest products facilities across Louisiana and the country. LFA would appreciate your willingness to consider flexible approaches that appropriately address the diversity of boilers, operations, sectors, and fuels that could prevent severe job losses and billions of dollars in unnecessary regulatory costs.

Specifically, LFA requests you consider four particular issues. First, the proposal asks for comments on an approach that would allow facilities to demonstrate that emissions of certain pollutants do not pose a public health threat, but concludes that the use of the authority under section 112 (d) (4) is discretionary and the Agency does not support its use in Boiler MACT. We believe that provision reflects Congress' intent to provide for flexibility where there is not a public health threat. In such cases, it makes sense to allow that approach in the final rule for threshold substances such as hydrogen chloride and manganese.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Troy Runge

Commenter Affiliation: Wisconsin Bioenergy Initiative

Document Control Number: EPA-HQ-OAR-2006-0790-2245

Comment Excerpt Number: 1

Comment: There is overwhelming scientific evidence that current fossil-fuel dependent energy sources are unsustainable and that immediate change in the resources from which we obtain our fuels is critical. Wisconsin is one of six Midwestern states that contribute 25% of greenhouse gas emissions in the United States and 5% worldwide.' Due to its lack of oil, coal, natural gas and uranium, the state is far more dependent on the importation of fossil fuels than most states. Wisconsin obtains 68% of its electric energy from coal and spends \$853 million annually, making it fifth in the nation in the portion of electricity derived from coal." In 2008 Wisconsin's energy bill grew to 10% of Gross State Product, a rise from 6% in 2000. As demonstrated when Governor Jim Doyle announced last year that the University of Wisconsin-Madison Charter Street Heating Plant would use a mixture of biomass (such as wood waste and agricultural residues) and natural gas, Wisconsin has strategically invested in bioenergy.

The proposed rule will have a significant impact on the EPA-estimated 400 biomass-burning boilers in the nation. Many of the biomass-fueled boilers in compliance with the original 2004 rule will not be in compliance with the new rule's more stringent emission limits. The hydrogen chloride (HCl) limit will require many biomass fuel boilers to install scrubbers or inject an alkaline sorbent such as lime. The mercury (Hg) limit would require many boilers to install powdered-activated-carbon-sorbent injection systems, although sufficient data does not exist to know whether activated carbon injection is capable of reducing mercury emissions to the levels required by the new rule. The Carbon Monoxide (CO) and dioxin/furan limits will pose additional challenges for most biomass boiler projects as little emissions testing has been conducted to understand the magnitude of these emissions or how best to control them.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Mary L. Frontczak

Commenter Affiliation: Peabody Energy

Document Control Number: EPA-HQ-OAR-2006-0790-2163.1

Comment Excerpt Number: 1

Comment: EPA proposes to establish strict MACT standards for coal-fueled boilers. These standards will apply to three subcategories of boilers and process heaters for units fueled by coal,

four subcategories fueled by biomass, and one subcategory each for units fueled by liquids (such as distillate oil or residual oil), and gaseous fuel (other than natural gas or pipeline gas). These MACT standards will apply to five types of HAPs: particulate matter ("PM"), hydrogen chloride ("HCl"), mercury, carbon monoxide, and dioxins/furans.

For each of the three coal-fueled subcategories, the MACT floor standards are proposed to be made considerably more stringent as compared with EPA's existing standards. For existing boilers, the MACT floor standard for PM is reduced from 0.07 to 0.02 parts per million British thermal units ("ppm Btu"); the MACT floor standard for HCl emission limits is reduced from 0.09 to 0.02 ppm Btu; and the MACT floor standard for mercury emission limits is reduced from 0.000009 to 0.000003 ppm Btu. A new MACT floor standard is also instituted for coal carbon monoxide emissions and dioxin/furan emissions.

For new coal-fueled boilers, the MACT floor standard for PM emission limits is reduced from 0.025 to 0.001 ppm Btu; the MACT floor standard for HCl emission limits is reduced from 0.02 to 0.00006 ppm Btu; and the MACT floor standard for mercury emission limits is reduced from 0.000003 to 0.000002 ppm Btu. The rule also reduces the MACT floor standard for carbon monoxide emission limits and institutes a new MACT floor standard for dioxin/furan emissions.

Additionally, boilers and process heaters need only burn at least 10 percent coal on an annual average heat input basis to be classified in the coal category.

EPA, however, did not propose MACT standards for owners or operators of boilers or process heaters which combust natural gas or refinery gas. Instead, EPA proposed a "work practice" standard that would be applied to those units. This work practice standard would require only that owners or operators of such boilers perform a tune-up and an energy assessment in order to comply with this rule.

According to EPA, these work practice requirements will reduce cumulative emissions from natural gas-fueled units by a meager 212.21 tons. In contrast, the emission limits applied to coal-fueled units will result in those units being forced to reduce their total tons per year of emissions by a cumulative 53,717.1 tons.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Winslow Sargeant

Commenter Affiliation: U.S. Small Business Administration

Document Control Number: EPA-HQ-OAR-2006-0790-1950.1

Comment Excerpt Number: 1

Comment: EPA has chosen not to follow the recommendation of small entity representatives to either adopt a Health-Based Compliance Alternative for hydrogen chloride (HCl) and manganese

emissions or make a determination that adopting such an alternative emission standard is inconsistent with, or unlawful under, the Clean Air Act

EPA has proposed not to exercise its discretion to use section 112(d)(4) to establish a health-based emission standard for HCL and manganese, despite acknowledging that it has such discretion under the Clean Air Act.

EPA should have proposed an emissions averaging program more in line with what SERs requested rather than the restricted program outlined in the proposal. Emissions averaging is an option for individual facilities that have multiple affected sources on site that saves money and obtains the identical or better emission reductions. By allowing these facilities to average emissions across various affected units, they can focus their investments on the units that will provide the biggest environmental impact per dollar spent, rather than targeting every affected unit to meet a single limit. This approach has the potential to produce a greater emissions reduction than requiring each individual source to meet the standard, while reducing the cost of compliance to the facility, and has been successfully utilized in several proceeding rulemakings. In the proposed rule, EPA limits the flexibility and potential effectiveness of emissions averaging by placing overly strict limitations on a facility's ability to employ averaging.

First, EPA should base the emissions averaging option on actual operating times and emissions rather than on design capacity of affected units. This would have provided more flexibility for facilities that have backup units or other limited use boilers, especially since EPA chose not to create a limited use subcategory. Second, EPA should not have limited the option to encompass only those sources which fall into the same subcategory based on fuel type. This requirement is unnecessarily restrictive and severely limits the flexibility of emissions averaging. Finally, the 10 percent penalty for choosing emissions averaging is again unnecessarily restrictive and again severely limits the flexibility of emissions averaging. Furthermore, EPA waives the penalty for facilities that average across units emitting from the same stack within a facility, despite the fact that the total emissions from units emitting from the same stack are identical to emissions from units emitting from separate stacks as long as all else is held constant.

Advocacy urges EPA to reconsider the emissions averaging option and to remove the impediments to small entities using it as a viable flexibility option that are outlined above, and similar to previous rules adopted by the Agency. EPA should return to the more basic emissions averaging concept that was discussed during the panel and which the panel report unanimously recommended as an important flexibility option.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Regina Hopper

Commenter Affiliation: America's Natural Gas Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1998.1

Comment Excerpt Number: 2

Comment: ANGA supports the Agency's proposal to impose work practice standards on major source natural gas-fired ICI boilers and process heaters. This is an appropriate exercise of the Agency's discretion under Section 112(h) of the Clean Air Act. In addition, it appropriately reflects the superior environmental performance of natural gas over other fossil fuels currently being used to fire boilers and process heaters.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Sherilyn Coldwell

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-0072

Comment Excerpt Number: 2

Comment: I strongly support EPA's decision to reduce toxic pollution from such boilers, and especially applaud EPA's proposed regulation of hydrochloric acid and other dangerous acid gases produced by commercial and industrial boilers. Such acids pose substantial risks to industrial workers, as well as surrounding communities, and must be limited by the strict conventional Maximum Achievable Control Technology standards. I oppose any effort to establish a lesser "health-based" standard for acid gases; no such health-based standard exists.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Scott Manley

Commenter Affiliation: Wisconsin Manufacturers and Commerce

Document Control Number: EPA-HQ-OAR-2006-0790-2258.1

Comment Excerpt Number: 2

Comment: While we support EPA's decision to establish work practice standards in lieu of emission limits for certain gas-fired boilers, EPA should provide for work practice standards on all gas-fired units and biomass boilers with this rule. EPA has properly exercised its authority by proposing to rely on work practice standards in lieu of emission limits for certain gas-fired boilers. 75 Fed. Reg. 32025. By doing so, EPA is taking one important step toward making sure that these rules do not unduly harm certain segments of the nation's critical manufacturing base. As EPA recognizes, the capital cost of emissions controls for the numerous existing gas-fired boilers would be extraordinarily high. Id. Further, EPA correctly concluded that imposing

emission limitations on gas-fired boilers would create a disincentive for switching to gas from oil, coal or biomass as a control technique. Id. In fact, it could create an incentive for facilities to switch away from gas to other fuels. Both outcomes should be avoided.

EPA should, however, take the necessary next step and extend the work practice approach to all gas-fired units. Despite the exceedingly strict emissions limits that are proposed, EPA has not identified a demonstrated path to compliance for the remaining gas-fired units for which EPA has not proposed to make work practices available. Rather than imposing undue and unrealistic costs and standards on these remaining gas-fired boilers, EPA should allow work practices rather than require emissions limitations.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Al Hankins, Jr.

Commenter Affiliation: Hankins Lumber Company, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1841.1

Comment Excerpt Number: 2

Comment: We are concerned that many of the boilers used to set the MACT floor for existing units may be units that were "new" or already-modified existing units that were affected by the now-vacated Boiler MACT. Our concern is that these boilers likely installed control equipment to meet the previous Boiler MACT, and thus would produce much lower emissions in the 2008 survey than would otherwise have been produced. The vacatur of the Boiler MACT should not have been allowed to skew the results of the industry survey to facilitate even more stringent standards now.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Bruce A. Steiner

Commenter Affiliation: American Coke and Coal Chemicals Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2007

Comment Excerpt Number: 3

Comment: Additionally, in the proposed MACT rule for major source industrial boilers (Subpart DDDDD), EPA proposes that work practice standards are appropriate and justified for units in the Gas 1 subcategory out of concern for the cost of complying with numeric emissions limitations and based on the adverse policy incentives that would be created. 75 Fed. Reg. at

32025. This rationale applies equally when considering the need to regulate gas-fired units under the Proposed Rule and lends additional support to EPA's proposal not to regulate these units.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Mat Ehrhardt

Commenter Affiliation: California Air Pollution Control Officers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1995.1

Comment Excerpt Number: 3

Comment: CAPCOA believes EPA's conclusion that the Major Source MACT is only applicable to three biomass-burning facilities in the country is incorrect. Recent source tests at two BTE facilities in the San Joaquin Valley of California have shown HCl emissions in excess of ten tons per year, making them major air toxics sources and therefore subject to the major source boiler MACT. There is nothing unique or unusual about these 30 MW facilities that would lead to a conclusion that these are not representative of other such facilities.

Unfortunately, EPA's statement that there are only three such facilities in the nation may have led to a degree of complacency among that industry and its regulators, resulting in insufficient attention on the major source MACT standards. In fact, this issue has only recently come to our attention, as most BTE facilities in California have not tested for HCl; thus HCl emissions are not fully represented in toxic emissions inventories for such facilities.

We recommend EPA thoroughly examine this issue. If our conclusion is correct that EPA has significantly underestimated the universe of BTE sources to which the major source MACT is applicable, the BTE applicability discussion should be modified appropriately and additional time provided for interested parties to comment.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: William Rogers

Commenter Affiliation: DTE Energy

Document Control Number: EPA-HQ-OAR-2006-0790-2159.1

Comment Excerpt Number: 5

Comment: We also support EPA's decision, for boilers at major sources, to rely on work practice standards rather than emissions limits, but would also recommend that these work practices should not be limited to manufacturer recommendations. Reference methods for

determining proper air/fuel mixtures can be impractical, and manufacturer's recommendations may be nonexistent or superseded by operator experience with particular pieces of equipment.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Regina Hopper

Commenter Affiliation: America's Natural Gas Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1998.1

Comment Excerpt Number: 5

Comment: Fuel Switching As a MACT Control Option Under Section 112

The CAA requires that EPA set emissions standards for each category or subcategory of major sources of HAPs, with the goal of reducing such emissions. These emissions standards are based on maximum achievable control technology ("MACT") and determined using a two-step process. EPA first sets a MACT emissions floor for each HAP and source category, with different methodologies for new and existing sources. The MACT floor for new sources is the standard achieved by the best controlled similar source; the MACT floor for existing sources is the average limitation achieved by the best-performing 12 percent of existing sources. EPA then determines if a more stringent "beyond-the-floor" emissions standard is achievable, with consideration of costs and other factors and application of measures specifically including materials substitution and process changes as options.

Because the CAA is intended to reduce emissions of HAPs and because materials substitution, or "fuel switching," to cleaner fuels can reduce HAP emissions, EPA is required to consider fuel switching as a MACT control option. The Act allows fuel switching as a control option in setting MACT floors and specifically names it as a potential emission control option for consideration when setting beyond-the-floor standards.

In setting MACT floors, fuel switching is an allowed, and encouraged, control option. The U.S. Court of Appeals for the D.C. Circuit has recognized that materials substitution is a valid emissions reduction strategy to be considered in setting emissions standards. Legislative history confirms this:

The technologies, practices or strategies which are to be considered in setting emission standards under this subsection go beyond the traditional end-of-the-stack treatment or abatement system. The Administrator is to give priority to technologies or strategies which reduce the amount of pollution generated through process changes or the substitution of materials less hazardous. Pollution prevention is to be the preferred strategy wherever possible.

In narrow circumstances where legislative history indicates that Congress may have not intended fuel switching to apply to certain source categories such as mining metals and ores, the statute

provides no such exceptions, and courts have not based decisions on such legislative history. Indeed, EPA has recognized that fuel switching is allowed in setting MACT floors and has considered it numerous times when setting floors for various source categories. [Footnote: See, e.g., 64 Fed. Reg. 31898, 31917 (Portland Cement Manufacturing Industry); 67 Fed. Reg. 49398, 49414 (Hydrochloric Acid Production); 67 Fed. Reg. 78046, 78059-62 (Lime Manufacturing Plants); 69 Fed. Reg. 4652, 4669 (Electric Utility Steam Generating Units); 69 Fed. Reg. 21198, 212273-74 (Hazardous Waste Combustors).

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Kevin M. Dempsey

Commenter Affiliation: American Iron and Steel Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2061

Comment Excerpt Number: 6

Comment: The EPA database is also deficient in other ways. For example, EPA has dioxin data for five sources in the Gas 2 Subcategory (arguably applicable to process gas-fired units if not otherwise exempted as discussed below) but uses only one source to determine the MACT floor for existing sources. The Clean Air Act requires a minimum of five sources to calculate reasonable MACT floors for existing sources. EPA's approach would set MACT floors for existing units equal to those for new units, which is inconsistent with the statutory structure.

As another example, EPA uses a single data point to set Hg and hydrochloric acid (HCl) limits for Gas 2 units, and only two data points for the PM MACT limit. EPA has abused its discretion by establishing MACT floors for Gas 2 units without collecting adequate data to support the MACT calculation as Congress intended.

Moreover, coke oven gas is unique among fuels and in any case should not be lumped into a Gas 2 subcategory based on emissions data collected for boilers burning other fuels. If coke oven gas-fired boilers and other process gas-fired units are not entirely exempted as argued below and are to be regulated under the Area Source Rule, AISI believes it is necessary for EPA to develop a robust database specific to coke oven gas-fired units and to establish a unique subcategory for those units. Justification for this recommendation is contained in AISI's comments on the proposed Subpart DDDDD rule.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Tim W. Sonnichsen

Commenter Affiliation: Sonnichsen Engineering, LLC

Document Control Number: EPA-HQ-OAR-2006-0790-2139.1

Comment Excerpt Number: 6

Comment: Similarly, the CO emission limit for new natural gas-fired boilers is one (1) ppm. Again, from a practical standpoint, specification of such a “standard” is unbelievable and demonstrates a total lack of understanding of practical emission levels from gas-fired industrial boilers. The standard for these units is generally 200 ppm based on achieving minimal emissions and the highest practical thermal efficiency.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Tim W. Sonnichsen

Commenter Affiliation: Sonnichsen Engineering, LLC

Document Control Number: EPA-HQ-OAR-2006-0790-2139.1

Comment Excerpt Number: 8

Comment: The presumption of “controlled” Hydrogen Chloride (HCl) and Mercury (Hg) is preposterous

It is simply a matter of input and output. Chlorine is a naturally occurring element in all biomass fuels. It evolves as a gas during combustion and is released with the stack gases.

With one exception, I am not aware of any biomass-fired boiler that has imposed specific emission control technology to limit HCl emissions. (The only exception is a boiler firing urban wood materials high in chlorine.) All other boilers, including likely all of the boiler’s in the MACT study, emit HCl that is naturally occurring in the fuel. Some fuels will contain higher levels of chlorine because of the alkalinity of the soil, proximity to salt water, or the individual biomass specie . Some will have very low chloride levels do to the opposite factors. To impose an HCl limit on one boiler based on naturally occurring low levels chlorine in the fuels of another boiler is inappropriate and not technically justified.

The situation with Hg is similar. The Hg fuel data used to prepare the MACT standards indicate that the naturally occurring levels of Hg vary widely due to natural factors. It is not reasonable to impose an emission “control” standard on one boiler that happens to have high Hg in the fuel based on the emission levels of another boiler that has naturally occurring low levels.

The available data on HCl and Hg emissions indicate that there is some capture within the boiler do to reactions of HCl with alkali materials and Hg condensation onto fly ash materials. These again are naturally occurring processes that are specific to the boiler’s design, gas temperature patterns, and ash characteristics. These are not specifically “control” technologies. To assert that boilers with low levels of HCl and/or Hg due to naturally occurring capture processes within the boiler are equipped with “control technologies” and, as such, can be used to specify emission levels on other boilers , is ludicrous.

Minimizing Dioxin and Furan Emissions to the MACT standards is “overkill”

My work on waste-to-energy facilities in Poland indicates that the EU has extensively studied the potential harmful effects of Dioxins/Furans. They have set as a standard an emission level of 0.1 ng/m³.

The proposed MACT standards will require Dioxin/Furan control below 0.02 ng/m to 0.0004 ng/m depending on the age and type of biomass source. This is 5 to 250 times lower than the standard established by the EU. Is such a stringent standard really needed?

Understand that no biomass-fired industrial boiler included in your study database was equipped with a “Dioxin/Furan control system.” These are merely the naturally occurring levels of emissions from biomass units that typically have very low levels of chlorine (need to generate Dioxins) and relatively high temperature and time characteristics (needed to burnout Furans). As mentioned above, EPA’s practice of considering low emission levels from a selected boiler population as the result of the alleged “application” of control technologies is ludicrous.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Regina Hopper

Commenter Affiliation: America’s Natural Gas Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1998.1

Comment Excerpt Number: 9

Comment: The cursory discussion of the emission impacts from fuel switching in the Proposed Major Source ICI Boiler MACT Rule is incomplete, and it dramatically understates the predicted benefits of fuel switching. EPA indicates that fuel switching “would decrease PM and some metals emissions.” Its own consultant, however, concludes:

“In general emissions of Hg, filterable PM, HCl, HF, SO₂, CO, THC, VOC and non-mercury metallic HAP decreased when switching to NG. For residual liquid and process gas subcategories, formaldehyde emissions increased as a result of fuel switching. However, total emissions of formaldehyde experienced a net reduction when all fuel categories were factored. [Footnote: ERG Fuel Switching Memorandum, Table 2-3 (p.5) at 11.]

Tables 2.2 and 2.3 of the ERG Fuel Switching Memorandum summarize the total emission reductions of all HAPs from fuel switching from each of the subcategories and in the aggregate. Emissions of metallic HAPs would decrease by almost 4,300 tons per year, [Footnote: ERG Fuel Switching Memorandum, Table 2-3 (p.5) at 4.] and emissions of all other HAPs (and HAP surrogates used by EPA in the Proposed Major Source ICI Boiler MACT Rule) would also decrease across the board, with significant decreases in hydrogen chloride (42,289 tons per year),

hydrogen fluoride (8,043 tons per year) and mercury (8 tons per year). [Footnote: ERG Fuel Switching Memorandum, Table 2-3 (p.5) at 5.]

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Regina Hopper

Commenter Affiliation: America's Natural Gas Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1998.1

Comment Excerpt Number: 10

Comment: The ERG Fuel Switching Memorandum compares the HAP emission reductions that would be achieved through fuel switching to the HAP emission reductions that would be achieved through implementation of the MACT option proposed in the Proposed Major Source ICI Boiler MACT Rule. [Footnote: ERG Fuel Switching Memorandum, Table 2-3 (p.5) at Appendix A-7.] These tables break down the emissions data on a subcategory-by-subcategory basis; there is also a comparison of the aggregate emissions decreases as well. Appendix A-7 shows that emissions reductions from fuel switching would exceed emissions reductions from the proposed option for every class of pollutants included in the table except for hydrogen chloride (HCl), where emission reductions from fuel switching (42,289 tpy) would be 0.3% -- 114 tpy -- less than emission reductions from the proposed option (42,403 tpy).

As this wealth of data shows, fuel switching would lead to significant HAP emission decreases; it should be cited as supporting the utilization of fuel switching as a control option for its MACT floor level of control analysis.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Martha E. Rudolph

Commenter Affiliation: Colorado Department of Public Health and Environment

Document Control Number: EPA-HQ-OAR-2006-0790-1979.1

Comment Excerpt Number: 11

Comment: Colorado supports the inclusion of a specific provision authorizing the burning of waste tires in cement kilns under the Boiler/Process Heater MACT provisions and not CISWI. The Definitions Rule allows for a case-by-case petition to the Regional Administrator that is desirable for specific situations. It would be more appropriate to have a specific provision allowing the use of waste tires as a fuel or ingredient in a cement kiln. Absent such a provision, given the uncertainty and time to process the petition, it is likely that more tires will be sent to

the landfill annually, illegally disposed or stock piled. Greenhouse gas emissions would increase while the associated viable use of a readily available energy source would be lost.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Tim W. Sonnichsen

Commenter Affiliation: Sonnichsen Engineering, LLC

Document Control Number: EPA-HQ-OAR-2006-0790-2139.1

Comment Excerpt Number: 11

Comment: The economic effects on boilers located in Major HAP's Sources would be significantly greater due to the larger number of pollutants to be controlled. In this case, the rule provides better estimates the capital and annualized costs of equipment. Table 9 presents EPA's estimates. The existing 239 biomass units are projected to spend an average of \$5.2 million dollars per unit on capital investments. This will add approximately \$1.3 million dollars to the annual operating costs of the facility. In many instances, this will challenge the economic viability of the facility.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Regina Hopper

Commenter Affiliation: America's Natural Gas Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1998.1

Comment Excerpt Number: 11

Comment: In the original January 13, 2003, proposed rule for the ICI Boiler MACT, EPA discussed the issue of fuel switching as a control option and, with respect to the issue of the overall effect of fuel switching on HAP emissions, used the identical language used in the Proposed Major Source ICI Boiler MACT Rule, while citing to a prior iteration (from 2002) of the ERG Fuel Switching Memorandum. [Footnote: 68 Fed. Reg. 1660, at 1672 (Jan. 13, 2003).] In the 2003 proposed rule the Agency acknowledged that fuel switching would result in decreased emissions of some HAPs, but apparently concluded that it would be inappropriate to do a further analysis regarding whether the overall emissions effects would justify including fuel switching as a control option.

We believe that it is inappropriate in a MACT rulemaking to consider as MACT a control option that potentially will decrease emissions of one HAP while increasing emissions of another HAP. In order to adopt such a strategy, EPA would need to assess the relative risk associated with each

HAP emitted, and determine whether requiring the control in question would result in overall lower risk. Such an analysis is not appropriate at this stage in the regulatory process. [Footnote: 68 Fed. Reg. 1660, at 1672 (Jan. 13, 2003).]

ANGA questions whether the CAA permits the Agency to discount further analysis of fuel switching on this basis. The more recent MACT Floor Analysis cited by EPA as the basis for the Proposed Major Source ICI Boiler MACT Rule, Singleton, Amanda. Memorandum to Jim Eddinger, U.S. EPA. MACT Floor Analysis for the Industrial, Commercial, and Institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Pollutants – Major Source. April 2010. which uses much more recent data from the Phase I and Phase II ICR 2008 Combustion Surveys, does not discuss fuel switching at all. The Agency seems instead simply to have repeated out-dated conclusions it reached when it developed the 2003 proposed rule in making the determination not to consider fuel switching as a control option in the Proposed Major Source ICI Boiler MACT Rule.

For these reasons, EPA's conclusion with respect to the overall effect of fuel switching on HAP emissions, as a factor in the Agency's determination not to consider fuel switching as a control option, is arbitrary, capricious, and unsupported by the record.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Regina Hopper

Commenter Affiliation: America's Natural Gas Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1998.1

Comment Excerpt Number: 12

Comment: EPA cites the feasibility of fuel switching as another factor in its decision not to consider fuel switching as a control option:

There is a significant concern that switching fuels would be infeasible for sources designed and operated to burn specific fuel types. Changes in the type of fuel burned by a boiler or process heater (solid, liquid, or gas) may require extensive changes to the fuel handling and feeding system (e.g., a stoker using wood as fuel would need to be redesigned to handle fuel oil or gaseous fuel). Additionally, burners and combustion chamber designs are generally not capable of handling different fuel types, and generally cannot accommodate increases or decreases in the fuel volume. Design changes to allow different fuel use, in some cases, may reduce the capacity and efficiency of the boiler or process heater. Reduced efficiency may result in less complete combustion and, thus, an increase in organic HAP emissions. [Footnote: 75 Fed. Reg. at 32019.]

ANGA notes that this language appeared, verbatim, in the 2003 proposed rule; as a preliminary matter, ANGA questions whether there has been any additional evaluation of the current state of combustion technologies, including technologies such as dual-fired equipment.

Switching fuels is not technologically infeasible for sources originally designed to burn a particular fuel source. Conversion of existing equipment designed burn a fuel other than natural gas does not require new technologies; rather, as EPA recognizes, it involves changes to equipment, [Footnote: See, e.g., a discussion of the type of equipment changes necessary to convert a boiler from coal-fired to natural gas-fired at <http://energyexperts.org/EnergySolutionsDatabase/ResourceDetail.aspx?id=2325>.] not unlike the installation of air pollution control equipment at an existing source that is necessary to meet new emission standards.

Companies such as Babcock & Wilcox Power Generation Group, Inc. advocate conversion from coal-fired units to natural gas-fired units and have published materials discussing the operational, technical and financial considerations to be evaluated in analyzing fuel switching, including the requisite modifications to existing equipment. [Footnote: See Binkiewicz, F.J., et al., Natural Gas Conversions of Existing Coal-Fired Boilers, available at www.babcock.com/library/pdf/MS-14.pdf, at 1.] Babcock & Wilcox reference successful conversions in Ohio and outside the United States. [Footnote: See Binkiewicz, F.J., et al., Natural Gas Conversions of Existing Coal-Fired Boilers, available at www.babcock.com/library/pdf/MS-14.pdf, at 2, 3.] Coal-to-gas boiler conversion to generate process steam has also been conducted recently and successfully in South Africa. [Footnote: See Thomaz, C., “Large Coal-to-Gas Boiler Conversions Completed,” Engineering News Online, available at www.engineeringnews.co.za/print-version/large-coaltogas-boiler-conversions-completed-2009-01-30 (January 30, 2009).] Clearly the technology exists and is feasible to implement, and EPA seems to acknowledge this indirectly when it states that such a conversion “may require extensive changes to the fuel handling and feeding system.” [Footnote: 75 Fed. Reg. at 32019.]

If such conversions are not technologically infeasible, the infeasibility must arise elsewhere, and ANGA is concerned that, with respect to its MACT floor determination, the Agency is impermissibly using the costs of such conversions to determine infeasibility. “However, EPA may not consider costs or other impacts in determining the MACT floor.” [Footnote: 75 Fed. Reg. at 32019.]

ANGA has not been able to find any other, non-cost related factors in the record that would support a determination that fuel switching is not feasible. Going back to the 2002-2004 rulemaking and the Agency’s “Response to Public Comments” document, EPA appears to have confirmed that the infeasibility of fuel switching was in fact cost-based: “This cost differential [high cost of natural gas relative to other fuels] results in the infeasibility of fuel switching to natural gas.” [Footnote: Eddinger, Jim. Memorandum to Robert Wayland, U.S. EPA, ESD Combustion Group. Response to Public Comments on Proposed Industrial, Commercial, and Institutional Boilers and Process Heaters NESHAP. February 25, 2004.]

Because the information cited to in the Proposed Major Source ICI Boiler MACT Rule appears to be the same information used by the Agency in the 2002-2004 rulemaking, where EPA acknowledged that the cost served as the basis for its infeasibility determination, and because there does not appear to be any other, additional information upon which the Agency is basing its determination in this Proposed Major Source ICI Boiler MACT Rule, the determination appears

to have again been made based on cost factors, an approach that is not allowed with respect to the MACT floor.

We recognize that cost is a factor in the analysis of control options for the “beyond-the-floor” scenario, in addition to other non-air quality health and environmental impacts and energy requirements. [Footnote: 42 U.S.C. § 7412(d)(2).] Given the amount of time and attention that has been paid to the issue of fuel switching in the context of combustion equipment, we would expect that an estimate of the cost of fuel switching, including capital costs and operating costs, would be based on relatively recent data. However, it appears that the Agency is relying upon cost information dating back as far as 1986.

The ERG Fuel Switching Memorandum sets forth the basis for the Agency’s analysis of costs involved with fuel switching. While that analysis does use information gathered in the 2008 Boiler and Process Heater Questionnaire (ICR No. 2286.01) for the universe of combustion units and the types of fuel they burn, the base costs and the cost sources that the Agency relied upon are the same ones that EPA used for the 2002 analysis (escalated to 2008 costs). [Footnote: ERG Fuel Switching Memorandum, at 8.] These sources include, as the basis for the capital costs for certain equipment, a December 1986 study. [Footnote: Fay, James et al., Massachusetts Institute of Technology, “Feasibility and Cost of Converting Oil- and Gas-Fired Utility Boilers to Intermittent Use of Natural Gas.” December 1986.]

To the extent that the Agency determined that the significant cost of fuel switching was one of the factors it relied upon in determining that fuel switching was not an appropriate beyond-the-floor option (an assumption that is not completely clear), ANGA does not believe that it is appropriate to rely on capital cost estimates from a 24-year old study in developing the overall estimate for fuel switching costs.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Regina Hopper

Commenter Affiliation: America's Natural Gas Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1998.1

Comment Excerpt Number: 13

Comment: In the Proposed Major Source ICI Boiler MACT Rule EPA cites a third factor it considered when evaluating fuel switching as a control option: the availability of alternative fuel types such as natural gas.

Although there is a plethora of information and data regarding the current and future supply of natural gas and infrastructure necessary to transport and store natural gas, the Agency fails to cite or identify a single source for the following broad statements which the Agency claim support its conclusion.

Natural gas pipelines are not available in all regions of the U.S., and natural gas is simply not available as a fuel for many industrial, commercial, and institutional boilers and process heaters.

Even where pipelines provide access to natural gas, supplies of natural gas may not be adequate. [Footnote: 75 Fed. Reg. at 32019.]

ANGA submits that there is no evidence in the record to support these conclusions. Furthermore, once again, this discussion is repeated, verbatim, from the 2003 proposed rule, and there is ample evidence to support the proposition that the natural gas infrastructure and supply are in a very different position than they were in the period immediately preceding the 2003 proposed rule. Finally, as is discussed further below, currently available information refutes the notion that there is insufficient supply or inadequate infrastructure to support demand that could be created if EPA were to endorse fuel switching as a control option for purposes of this MACT standard. ANGA endorses the comments filed by the American Gas Association with regard to information provided therein addressing these supply and infrastructure issues.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Lee B. Zeugin

Commenter Affiliation: Utility Air Regulatory Group

Document Control Number: EPA-HQ-OAR-2006-0790-1957.1

Comment Excerpt Number: 14

Comment: EPA has requested comments on whether it should impose a health-based standard under § 112(d)(4) for HCl and other acid gas emissions from IBs. See 75 Fed. Reg. at 32,030. Section 112(d)(4) is designed to prevent the promulgation of unduly stringent emission limits simply for the sake of regulation. Section 112(d)(4) allows EPA to set health-based limits for certain HAPs based on established health thresholds, rather than having to follow the technology forcing provisions of § 112(d)(3). As a practical matter, § 112(d)(4) applies to non-carcinogenic HAPs [Footnote: Almost without exception, EPA assumes a linear, no-threshold dose-effect relationship for HAPs that are classified as carcinogens.] for which EPA has established a health threshold such as a reference concentration (“RfC”) or a reference dose (“RfD”). EPA defines a reference concentration in its Information Risk Information System (“IRIS”) database as “[a]n estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime.” [Footnote: The definition for a reference dose is essentially the same except it focuses on exposures by pathways other than inhalation.] Thus, human exposures to a HAP at levels below its RfC are considered “safe” particularly given the uncertainty factors that EPA includes as part of its derivation of a RfC.

Congress' inclusion of § 112(d)(4) in the 1990 CAA Amendments indicates an intent to retain the health endpoint of the original § 112 -- protection of public health with an ample margin of safety. [Footnote: The ample margin of safety concept also underlies the current residual risk provisions of CAA § 112(f).] If the emissions of a given HAP from all sources in a source category are at a level where public health is protected with an ample margin of safety, then there is no practical need for or benefit from further regulation. EPA should set health-based standards under § 112(d)(4) when facts support its use.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Michael A. Livermore

Commenter Affiliation: Institute for Policy Integrity New York University School of Law

Document Control Number: EPA-HQ-OAR-2006-0790-1899.1

Comment Excerpt Number: 14

Comment: For the Major Source Rule, EPA is proposing to allow emissions averaging within a regulated source over its existing individual boilers in the same category. This is being proposed as a flexibility mechanism because emissions reductions may be cheaper at a particular unit. This proposal is subject to several conditions including an “emissions averaging plan” and a cap on the overall emissions level. [Footnote: 75 Fed. Reg. at 32,034-35.] In addition to these other safeguards, EPA is proposing a discount factor of ten percent to “ensure that averaging will be at least as stringent.” [Footnote: 75 Fed. Reg. at 32,035.] The agency is requesting comment on “use of a discount factor and whether ten percent is the appropriate discount factor.” [Footnote: 75 Fed. Reg. at 32,035.]

While the practical effect of this is not clear from the preamble, it is possible to discern its impact from the proposed regulatory language. Section 63.7522(d) of the proposed rule states that the “The averaged emissions rate from the existing boilers and process heaters participating in the emissions averaging option must be in compliance with the limits in Table 2 [emissions limits for existing sources] to this subpart at all times following the compliance date. . . .” [Footnote: 75 Fed. Reg. at 32,035.]

Section 63.7522(e) then gives two alternative formulas to demonstrate initial compliance. According to these formulas, the average emissions rate used to determine compliance is only 90% of the actual weighted average emissions rate (in this case, weighted by the maximum rated heat input capacity). Subsequent to this, each entity must demonstrate compliance on a monthly basis according the formulas laid out in Section 63.7522(f). [Footnote: 75 Fed. Reg. at 32,034-35.] Similarly to the formulas for initial compliance, the average emissions rate here is also only 90% of the actual weighted average emissions rate (weighted here by actual heat input).

These formulas appear to be mistaken and, instead of multiplying by 0.9, they should be multiplying by 1.1 (or dividing by 0.9). To see the error in the formulas, the simplest case can be

considered. If there are two boilers at the same facility with identical heat input capacity and actual monthly heat input, then instead of a weighted average the formulas reduce to a simple average. Thus, if both actual emission rates for a given pollutant are 1, then the simple average emission rate is 1. This figure is then multiplied by 90%, giving an emissions rate of 0.9 for the purposes of regulatory compliance. Obviously, the result of the formula is a lower emissions rate than the actual correct weighted average. This seems directly contrary to the stated purpose of the discounting provision and should be fixed by EPA.

If the formulas are corrected to be in accord with the stated purpose of the discounting provision, there will be several effects from discounting. By penalizing averaging, it disincentivizes sources from using this option. This will lead to fewer cost savings, which is the goal of allowing averaging in the first place. However, averaging may lead to fewer reductions in emissions and thus fewer benefits to the general public. The net effect of this is ultimately an empirical one. If the agency is under-regulating (as seems likely, see *supra* pp. 8-9), then the decrease in emissions reductions is unwarranted and not worth the reduced costs. However, if the standards are set efficiently (as we argue they should be), this should be unnecessary unless it is motivated by other concerns (such as measurement error).

EPA should have an independent justification for any discounting provision that explains why it should be implemented and not just what its effects are. It is impossible to determine what the proper discount factor should be without knowing the provision's purpose. The justification of ensuring stringency could equally well justify a discount factor of 5%, 10%, or 20%.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Regina Hopper

Commenter Affiliation: America's Natural Gas Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1998.1

Comment Excerpt Number: 14

Comment: Infrastructure. There is nothing in the Proposed Major Source ICI Boiler MACT Rule or in the documents available in the docket, beyond those data available in 2003, that provides any additional data or information to support the Agency's statement regarding infrastructure. In fact, the Agency's argument that the distribution infrastructure was insufficient to support fuel switching was challenged by the National Wildlife Federation in the context of that proposed rule. In its comments, the National Wildlife Federation stated that EPA needed to conduct a more quantitative assessment of the issue to support its infrastructure conclusions. In response, the Agency indicated that it "did not have sufficient information on natural gas supply or infrastructure." [Footnote: See, Response to Comments, *infra* note 36, at 100.]

If the Agency did not have sufficient information to make those statements at that time, and there is no additional data or information in the record to support these statements in the Proposed

Major Source ICI Boiler MACT Rule at this time, ANGA submits that the Agency still has not developed the quantitative assessment necessary to support any conclusion. Such an assessment is especially necessary in light of the significant differences between the conditions in 2000-2002 and now with respect to infrastructure and supply.

The Agency also makes the blanket statement that “natural gas is simply not available as a fuel for many [ICI] boilers and process heaters.” [Footnote: 75 Fed. Reg. at 32019.] However, the Agency’s consultant that developed the ERG Fuel Switching Memorandum assumed, for purposes of calculating the costs of fuel switching, that the number of sources where natural gas is not available at all was “negligible” and in the cost analysis assigned 0% to the appropriate subcategory, indicating that it assumed that no sources fell into this category. [Footnote: ERG Fuel Switching Memorandum, at 7. In developing costs for switching to natural gas, ERG broke up the source category into three subcategories, including category “C” where “...the facility does not use natural gas at all” and where additional infrastructure would be needed to bring natural gas to the facility. In order to “address the potential availability of natural gas at these facilities,” ERG further divided the subcategory into four additional cases, with case “C4” being a scenario where “Gas is not available at all.” ERG goes on to state that “the number of units in C4 was expected to be negligible” and therefore assigned 0% to scenario C4.] While ANGA is not necessarily endorsing that conclusion, the fact that EPA’s consultant made this assumption in the very document that EPA cites suggests that EPA’s position is not supported by the record.

Publicly available information supports the proposition that the natural gas infrastructure is sufficiently developed to be able to supply natural gas to the less than 2,000 sources identified by the Agency as currently existing or newly constructed sources that would be subject to this rule that do not currently burn natural gas, and that could therefore be subject to fuel switching if fuel switching were considered a control option in the MACT floor analysis.

According to the U.S. Energy Information Agency, “the U.S. natural gas pipeline network is a highly integrated transmission and distribution grid that can transport natural gas to and from nearly any location in the lower 48 States. [Footnote: http://www.eia.gov/pub/oil_gas/natural_gas/analysis_publications/ngpipeline/index.html] Department of Energy figures indicate that the interstate and intrastate transmission network feeds over 1.1 million miles of regional lines in some 1,300 local distribution utility networks, collectively delivering natural gas to 62 million customers in the United States, including electric generation and industrial/commercial/institutional customers. [Footnote: U.S. Department of Energy. Domestic Oil & Gas Resource Conservation: Making the Most of What We Have -- Transmission, Distribution and Storage, available at <http://www.fe.doe.gov/programs/oilgas/delivery/index.html>.]

According to a recent Interim Report issued by the MIT Energy Initiative (“MIT Interim Report”), the production and delivery infrastructure of natural gas in the U.S. is “both mature and robust.” [Footnote: MIT Energy Initiative. Interim Report, The Future of Natural Gas – An Interdisciplinary MIT Study, p. 59. ISBN (978-0-9828008-0-5)(July 2010).] The MIT Interim Report also focuses on recent developments.

Major changes in U.S. gas markets have prompted significant additions to the country's pipeline network over the last several years. Between 2005 and 2008, for example, pipeline capacity additions totaled over 80 Bcf/day, exceeding those from the previous four-year period by almost 100%. Additions of 44.5 Bcf/day in 2008 alone, exceeded total additions in the five-year period between 1998 and 2002. [Footnote: MIT Energy Initiative. Interim Report, The Future of Natural Gas – An Interdisciplinary MIT Study, p. 60. ISBN (978-0-9828008-0-5)(July 2010).]

With respect to the issue of concerns regarding natural gas infrastructure, the MIT Interim Report has this to say: “On the gas infrastructure side, concerns have been raised about the availability of gas pipeline capacity for the additional gas requirements of this option [displacement of coal generation], but preliminary analysis indicates that the industry has the ability to meet the needs for additional pipeline capacity.” [Footnote: MIT Energy Initiative. Interim Report, The Future of Natural Gas – An Interdisciplinary MIT Study, p. 65. ISBN (978-0-9828008-0-5)(July 2010) (citing to Kaplan, Stan, Displacing Coal with Generation from Existing Natural Gas-Fired Power Plants, CRS, 01/2010.).]

Finally, the Federal Energy Regulatory Commission also noted significant recent increases in the storage capacity for natural gas:

New storage capacity may be expected to complement this trend. More than 107 Bcf of incremental working gas capacity was added in 2009, including more than 50 Bcf in the Gulf region. Additional production area storage, in particular, allows suppliers to respond more adeptly to market signals, and as a result, those signals are moderated. EIA says that U.S. peak working gas capacity is around 3,900 Bcf. In late November 2009, U.S. inventories were 99% of capacity. [Footnote: Federal Energy Regulatory Commission, State of the Markets Report 2009 (April 15, 2010), p. 11.]

In the absence of any new or additional information in the record that would allow the Agency to quantitatively assess the adequacy of the infrastructure, the Agency still does not have sufficient information to rule out fuel switching as a control option on the basis of inadequate distribution infrastructure for natural gas. Further, in the face of recent information and data regarding the robust nature of the nation's natural gas infrastructure, ANGA believes that EPA's conclusion that infrastructure is inadequate to support fuel switching in the context of ICI boilers and process heaters is simply incorrect.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Lee B. Zeugin

Commenter Affiliation: Utility Air Regulatory Group

Document Control Number: EPA-HQ-OAR-2006-0790-1957.1

Comment Excerpt Number: 17

Comment: The proposed IB MACT rule allows emission averaging in certain circumstances. While emission averaging can, in theory, provide operational flexibility to sources, the emission averaging provisions of the proposed rule are so restrictive and highly conditioned that they are unlikely to be used. The proposed rule would apply a 10% “discount factor” on any source seeking to average emissions. This discount factor makes no sense and will deter averaging. As previously noted, EPA’s proposed IB MACT standards are so low that there are real questions about whether sources can comply with them using state-of-the-art control equipment. Effectively lowering those standards by 10% for sources that choose to average emissions makes an impossible compliance situation even worse. Also, there is no legitimate reason for imposing a 10% penalty of sources that seek to average emissions. Total emissions from a single facility have the same health effects on public health regardless of whether each unit at the facility meets the MACT limits or all units meet the MACT limits in the aggregate -- the total emissions from the facility remain the same. The proposed 10% penalty on operational flexibility yields no public health benefits.

Other onerous provisions in EPA’s proposed averaging program include the detailed averaging plan a facility would need to prepare and the cap on unit emissions that would not allow any unit participating in the averaging to have emissions any higher than it had on the effective date of the proposed rule. If EPA is serious about providing operational flexibility to facilities through facility averaging, then it must make substantial revisions to its proposed averaging provisions.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Regina Hopper

Commenter Affiliation: America's Natural Gas Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1998.1

Comment Excerpt Number: 18

Comment: When evaluating the practicability of applying measurement technologies to natural gas-fired boilers, we concur with EPA that the costs are not only the costs of the monitoring equipment and stack testing, but also the capital costs of any installed control technology [Footnote: 75 Fed. Reg. at 32024.] The capital cost of installed control technology, combined with the costs of monitoring and testing, for this subcategory exceed \$14.6 billion. [Footnote: McCluthey, Singleton et al. Memorandum to Jim Eddinger, U.S. EPA/OAQPS/SPPD. Methodology for Estimating Cost and Emissions Impacts for Industrial, Commercial, Institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Pollutants – Major Source. April 2010.] As EPA points out, this cost is higher than the estimated combined capital cost for boilers and process heaters in all of the other subcategories. [Footnote: 75 Fed. Reg. at 32025.]

In addition, Section 112(h) provides that an emission standard is “not feasible” where the Agency determines that requiring that the use of a conveyance to capture the HAPs would be

inconsistent with the CAA or other Federal, State or local laws. [Footnote: 42 U.S.C. § 7412(h)(2)(A).] If the Agency were to finalize requirements that would subject gas-fired boilers and process heaters to emission standards that would require that natural gas-fired sources install and operate the same combination emission control systems (fabric filter for PM, mercury, and D/F control and a wet scrubber for HCl control), there would be a disincentive for sources burning other than natural gas to switch to gas (which is both an emission reduction control technique and a pollution prevention technique).

The CAA is designed to promote emission reductions and pollution prevention, as are other environmental laws at the federal, state and local levels. A regulation that serves as a market barrier to implementation of strategies to reduce emissions and prevent pollution would be completely inconsistent with the myriad of federal/state/local laws that are designed to promote and achieve such reductions.

ANGA is not in a position to offer comments regarding the Agency's questions as to whether imposing emission limits on gas-fired boilers and process heaters "may have the negative benefit of providing an incentive for a facility to switch from gas (considered a "clean" fuel) to a "dirtier" but cheaper fuel (i.e., coal)." [Footnote: 75 Fed. Reg. at 32025.] To the extent that this possibility exists, however, ANGA strongly agrees that a regulation that could trigger increased emissions of HAPs would be inconsistent with Section 112 of the CAA.

We do note that recent experience has shown that some commercial and institutional entities are more aggressively evaluating installation of electric boilers or heating systems in lieu of gas-fired systems. If the Agency were to impose emission limits on gas-fired boilers and process heaters, it would remove a significant incentive for selecting gas-fired equipment (as electric systems are not subject to the Proposed ICI Boiler MACT Rules), while creating an incentive to switch away from natural gas, possibly to electric systems, where the electricity used to operate the systems comes primarily from coal-fired generation. It is widely accepted that significant air quality benefits accrue from burning natural gas over coal (on a pounds of air pollutants per million Btu of energy basis), and that there are inherent efficiency benefits of using natural gas at the site. [Footnote: U.S. Energy Information Administration. Natural Gas 1998: Issues and Trends. (April 1999), p. 58.] Therefore, an EPA regulation that incentivizes a switch from natural gas to electric systems that use electricity from coal-fired generation would be inconsistent with broader federal, state and local clean air goals.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Alicia Oman

Commenter Affiliation: National Association of Manufacturers

Document Control Number: EPA-HQ-OAR-2006-0790-2234.1

Comment Excerpt Number: 18

Comment: EPA's process and approach to data collection resulted in the Agency "cherry picking" the data, with the dataset arbitrarily and capriciously biased towards top performers. During the Phase I Boiler MACT data collection effort, EPA requested and received emissions data from most of the potentially affected sources across all of the subcategories for PM, CO, NOx and many HAPs. After sifting the Phase I data, EPA developed a Phase II plan for collecting additional data, which identified the specific tests that would be required for the different HAPS. The Phase II plan consisted of two rounds of testing. The first round consisted of an outlet stack test (three runs) for PM (filterable, condensable, and PM2.5), dioxin/furans, HCl/hydrogen fluoride, mercury, metals, CO, THC, formaldehyde, NOx and SO2. In addition, six facilities (two coal-fired, two biomass-fired and two gas-fired boilers) were required to collect CO, THC and NOx CEM data over 30 operating days, and each selected unit was also required to collect and analyze the materials fed to the combustion unit during each stack test. 75 Fed. Reg. 32,010. In selecting units for this Phase II testing, EPA targeted coal and biomass-fired boilers and any boiler that indicated that it burned waste. During this second round, however, EPA targeted only those sources whose data EPA determined it would need to set the MACT floor. Id.

In this way, EPA artificially limited the pool of data from which it drew its top 12% best performing sources. This is patently at odds with section 112(d) and with the intent of Congress in establishing this framework, which is intended to maximize the data considered by EPA. The result is completely arbitrary because EPA's sampling approach for Phase II created a dataset that is not shown to be representative of sources for which the data is being used to infer emissions for purposes of establish the MACT standards.

EPA arbitrarily and capriciously relied on data that does not meet the agency's own requirements for representativeness to set the MACT floors.

Representativeness is the measure of the degree to which data accurately and precisely represent a characteristic of a population. Guidance on Choosing a Sampling Design for Environmental Data Collection, EPA QA/G-5S, p. 1 (U.S. EPA 2002). In Phase II of the data collection, the ICR, EPA did not randomly select sampling units, a hallmark of probability-based sampling. Rather, EPA selected sampling units based on its understanding of which sources it would likely include in the MACT floor. EPA's approach is a form of "judgmental sampling," which EPA defines at the "selection of sampling units on the basis of expert knowledge or professional judgment." Id. at p. 10. According to EPA, probabilistic sampling is preferable where EPA wishes to draw quantitative conclusions about the sampled population through statistical inferences. Id., p. 10-11. When using judgmental sampling, however, EPA states that "statistical analysis cannot be used to draw conclusions about the target population," and "quantitative statements about the level of confidence in an estimate (such as confidence intervals) cannot be made." Id. at p. 11. Yet this is precisely what EPA has done in the proposed Boiler MACT. EPA's Phase II data collection is being used incorrectly to make statistical inferences about emissions of boilers in any given subcategory overall.

This approach does not meet EPA's own standards for data quality:

Judgmental sampling has some advantages and is appropriate in some cases, but the reviewer should be aware of its limitations and drawbacks. This type of sampling should be considered only when the objectives of the investigation are not of a statistical nature (for example, when the objective of the study is to identify specific locations of leaks, or when the study is focused solely on the sampling locations themselves). Generally, conclusions drawn from judgmental samples apply only to those individual samples; aggregation may result in severe bias due to lack of representativeness and lead to highly erroneous conclusions...Using a probabilistic statement with a judgmental sample is incorrect and should be avoided as it gives an illusion of correctness where there is none.

Data Quality Assessment: A Reviewer's Guide, EPA QA/G-9R, p. 11 (U.S. EPA 2006) (emphasis added). This severe bias is evident in the MACT floors set by EPA, which were set, not by examining data from randomly-selected sources representative of the sources as a whole and then averaging the 12% best-performing sources, but rather by examining data reflecting only EPA's best guess as to the best-performing sources, and then averaging the 12% best-performing of those. This fundamentally skewed the universe of data that EPA had to consider, and it led to the arbitrary outcome of floors that are more stringent than would have resulted from a fair and random sampling of the regulated sources.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Lee B. Zeugin

Commenter Affiliation: Utility Air Regulatory Group

Document Control Number: EPA-HQ-OAR-2006-0790-1957.1

Comment Excerpt Number: 22

Comment: In the IB MACT rule, EPA has proposed to require existing boilers and process heaters burning either natural gas or refinery gas to meet a work practice standard rather than emission limits. The work practice standard would require these units to conduct an annual tune-up. See 75 Fed. Reg. at 32,025. UARG supports EPA's decision to set a work practice standard for this group of gas-fired industrial boilers. The hazardous air pollutant emissions from these units are so low they are impossible to measure accurately. Furthermore, these vanishingly small emissions do not pose risks to public health and the cost of controlling these units dwarfs whatever minute benefits may result from limiting emissions.

This work practice standard should be extended to industrial boiler units burning coal-derived gas. Utilities are increasingly being asked to consider constructing integrated gas combined cycle ("IGCC") units. These units include a coal gasifier that produces gas for later combustion in a gas turbine. The gas from an IGCC unit is cleaned prior to combustion so in terms of trace HAPs it is little different than natural gas or refinery gas.

In fact, some coal-gasification processes include an additional methanation step that results in the production of synthetic natural gas (“SNG”). This product is indistinguishable from natural gas and can be transported in natural gas pipelines. The proposed distinction between natural gas and other gas sources (like SNG) could create future compliance problems. How will an industrial boiler end user know whether the pipeline delivered gas containing some amount of SNG and thus whether the industrial boiler is subject to work practice standards or emission limits?

The proposed gas distinction is unworkable. All gas-fired boilers should be subject to work practice standards. If, however, EPA decides to keep the proposed distinction between gas sources, then EPA should add coal-derived gas to the fuels in the Gas 1 category.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Lee B. Zeugin

Commenter Affiliation: Utility Air Regulatory Group

Document Control Number: EPA-HQ-OAR-2006-0790-1957.1

Comment Excerpt Number: 24

Comment: EPA proposes several compliance demonstration methods depending upon the size of the unit and whether controls are required to meet the proposed limit. For example, EPA proposes to require use of CO continuous emissions monitoring systems (“CEMS”) for all units with heat input capacity? 100 mmBtu/hr, and PM CEMS for all units with heat input capacity? 250 mmBtu/hr that combust coal, biomass, or residual oil, and to rely (at least in part) on evaluation of those CEMS to demonstrate initial compliance. Proposed 63.7510(c) and (d). EPA also generally proposes that sources demonstrate compliance through initial and annual performance tests using stack testing methods (and control device operating parameter limits), fuel analysis, or both. Proposed 63.7510(a) and (b). Specifically, for PM and CO, stack testing is required. Stack testing also is required for dioxin/furan (“D/F”). For Hg and HCl, EPA proposes two options (1) stack testing and an initial fuel analysis to determine maximum fuel pollutant input levels for Hg and chlorine, or (2) for units that combust fuel with a statistically lower pollutant content than the emission limit, fuel analysis (and calculation of an emission rate using a z-test to determine the 90th percentile confidence level to compare to the emission limit). Proposed 63.7505(c), 63.7515(a), 63.7530(b) and (c). UARG supports the use of stack testing and the fuel analysis option for Hg and HCl, but has a number of concerns regarding EPA’s proposed implementing rules. UARG also has significant concerns about use of CO CEMS to make compliance determinations at some of the proposed emission limits, and numerous objections to EPA’s proposed use of PM CEMS.

Existing units with heat input capacity of less than 10 mmBtu/hr, and new and existing natural/refinery gas-fired units (and metal process furnaces), are not subject to emission limits but instead must conduct a unit “tune-up” initially and every 10-12 months thereafter. [Footnote: However, the proposed rule is not consistent regarding the required frequency of tune-ups. See

infra Section II.G.] Proposed 63.7515(e), 63.7530(d), [Footnote: This provision appears to incorrectly state the applicability threshold for the work practice standard. See infra Section II.G.] 63.7540(a)(10) and (11), and Table 3. UARG supports the use of work practice standards, and urges EPA to expand that concept to other units. See supra pp. 17-20.

To demonstrate continuous compliance, units that perform stack testing must establish operating parameter limits during that testing for each control device as specified in the rule. Proposed 63.7510(a), 63.7530(b)(3), and Table 7. Units with dry controls and/or a fabric filter also must comply with an opacity standard and/or use a bag leak detection system (“BLDS”). Proposed Table 4. Units must repeat fuel analysis for Hg and/or HCl whenever a new fuel type is combusted and, if the result is greater than the prior maximum fuel input pollutant level, perform a new stack test within 60 days. [Footnote: The rule is unclear regarding whether fuel analysis must be repeated with subsequent performance tests if the fuel type, or fuel mixture has not changed. See infra Section II.G.] Proposed 63.7540(a)(4) and (6). Units that demonstrate compliance using fuel analysis must repeat the analysis monthly, or whenever a new type of fuel is combusted. [Footnote: The preamble states that although analysis is performed monthly, compliance is determined based on the “annual average.” 75 Fed. Reg. at 32,033. However, that averaging period is not reflected in the rule.] Proposed 63.7515(f). Operation above or below any applicable minimum or maximum in Table 4 constitutes an enforceable “deviation” of established operating limits that must be reported. Proposed 63.7540(a)(1).

UARG does not object to EPA’s general approach of using operating parameters to assure compliance in between stack tests. EPA has previously used this approach in the Compliance Assurance Monitoring (“CAM”) rule at 40 C.F.R. Part 64 to assure continuous compliance with NSPS and SIP standards that do not already specify continuous compliance methods. UARG does object to EPA’s proposed use of operating parameters as enforceable limits, and questions the achievability of the proposed 10 percent opacity standard, particularly in the absence of any exception for startup, shutdown, or malfunction. UARG also objects to several provisions related to BLDS and the lack of clarity in EPA’s proposed requirements for periodic fuel analysis. UARG’s detailed comments on those issues, and others, are set out below.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Lee B. Zeugin

Commenter Affiliation: Utility Air Regulatory Group

Document Control Number: EPA-HQ-OAR-2006-0790-1957.1

Comment Excerpt Number: 27

Comment: Under proposed § 63.7515, stack testing for D/F must be conducted annually without exception. Although EPA does not explain its logic, UARG assumes that EPA proposed annual testing for D/F to be consistent with the annual frequency proposed for other pollutants and did

not provide a reduced testing option for D/F out of concern that the proposed rule does not provide any operating limits directly associated with D/F control in between stack tests.

The lack of continuous operating limits does not necessarily mean that annual testing should be required. D/F differs from the other pollutants covered by the rule in several respects. First, few sources are likely to use controls to meet the proposed standard. As a result, the lack of control device operating limits is not a reason to require more frequent testing. Moreover, since there are no clear actions sources can take to address failed D/F test results, sources that fail a test are likely to achieve the standard simply by retesting. Second, D/F emissions are very low and there is no clear explanation for the differences in test results between units other than limitations in the ability to measure D/F at those low levels. Emissions are so low that EPA set the proposed emission limits near the detection level for the method (Method 23) and below the level at which D/F emissions can be accurately quantified. Method 23 samples also are easily affected by contamination. See, e.g., Method 23, § 4.2. As a result, differences in test results from year to year are just as likely to be the result of measurement issues as changes in actual emissions. Third, D/F testing is very expensive and there are only a limited number of laboratories qualified to perform the sample analysis. According to EPA's cost analysis the costs of D/F stack testing may range from \$15,000 to \$50,000. [Footnote: Memorandum, "Methodology for Estimating Control Costs for Industrial, Commercial, Institutional Boilers and Process Heaters National Emission Standards for Hazardous Air Pollutants -- Major Source" (Apr. 2010), EPA-HQ-OAR-2002-0058-0803, Appendix J-1. In the EGU ICR, EPA assumed a cost of \$42,000, Supporting Statement for Review of EPA ICR No. 2362.01 (Dec. 24, 2009), EPA-HQ-OAR-2009-0234-0102, Attachment 2.]

Given all of these factors, UARG questions the point of annual testing at all, let alone disallowing use of the reduced testing provision. EPA's proposed rule already requires source owners/operators to confirm that there are no changes in the operation of the affected unit or control equipment that could increase emissions. Proposed § 63.7550(c)(5). Unless EPA can identify some other factor that could influence D/F emissions, EPA should allow such tests to qualify for reduced testing under § 75.15(c) and should consider simply mandating biennial or triennial testing for all units. At a minimum since most of the ICR results were below the detection limit, EPA should provide for triennial stack testing for any unit that produces all non-detects.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Lee B. Zeugin

Commenter Affiliation: Utility Air Regulatory Group

Document Control Number: EPA-HQ-OAR-2006-0790-1957.1

Comment Excerpt Number: 34

Comment: All fuel analysis under the rule must be conducted according to an approved site-specific plan and according to specific procedures for sampling, preparation, and analysis. Proposed 63.7510(a) and (b), 63.7521. Although UARG does not object to a requirement to submit a plan or to use standardized procedures, EPA's proposed requirements are in many instances overly prescriptive. The primary objective should be to obtain fuel samples that are representative of the fuel that is being combusted. Because there is so much diversity in how fuel is received, stored, and processed at individual facilities, EPA needs to allow more flexible procedures to accomplish the primary objective.

Under proposed 63.7521(b)(1), the proposed plan must be submitted to the Administrator at least 60 days before the fuel analysis. Because some of the information required to be included may change from analysis to analysis, UARG assumes EPA intends sources to submit a new plan or update the existing approved plan if information changes. For example, the plan must include identification of all fuel types anticipated to be combusted and whether the source or fuel supplier will conduct the analysis. Proposed 63.7521(b)(2). Although it might be possible to submit that information 60 days in advance of the initial demonstration and receive approval before conducting the analysis, it may not be possible for subsequent analysis in response to changes in fuel type or fuel mixtures (since those might occur with less notice or planning). The requirement to submit a new or revised plan also makes little sense if monthly analysis is required. UARG requests that EPA either remove the requirement for advance submittal and approval of a plan after the initial compliance demonstration, or remove the requirement to include in the plan information that might change.

Proposed 63.7521 also includes very specific requirements for collecting composite fuel samples. For belt sampling, the rule requires that the belt be stopped. Proposed 63.7521(c)(1)(i). This requirement is not reasonable and apparently would not allow for the use of continuous belt samplers. In addition, many belts cannot be restarted with coal on them because the belt is too heavy for the motor to start. For sampling piles or trucks, the rule requires (among other things) use of a "square shovel," collection of samples at a depth of exactly "18 inches," collection at five locations "uniformly spaced over the surface of the pile," and breaking of pieces larger than exactly 3 inches. Proposed 63.7521(c)(2), (d). Although UARG does not object to the intent behind these requirements, representative samples can be taken with shovels of other shapes, at depths greater or less than 18 inches, and without measuring the actual size of individual coal pieces. UARG requests that EPA remove the prohibition on moving belt samplers, and reexamine and moderate the pile sampling requirements to provide more realistic criteria (e.g., use the same shovel for all samples, collect samples at a uniform depth of approximately 18 inches, and break apart large pieces (e.g., pieces greater than 3 inches)).

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Lee B. Zeugin
Commenter Affiliation: Utility Air Regulatory Group

Document Control Number: EPA-HQ-OAR-2006-0790-1957.1

Comment Excerpt Number: 37

Comment: Under the proposal, units subject to a PM, Hg, or HCl limit must establish minimum operating parameter limits during the three-run performance test for each applicable control device as described in proposed Table 7. 75 Fed. Reg. at 32,071. Thereafter, units must maintain those parameters consistent with the established limit based on a 12-hour average basis. Proposed 63.7540(a)(1), Tables 4 and 8. The parameters to which the minimum operating limits apply are pH, liquid flow-rate, and pressure drop for wet scrubbers; sorbent injection rate (and carbon injection rate) [Footnote: Although most of the provisions addressing dry scrubbers do not refer to carbon injection rate, the term “minimum sorbent injection rate” is defined to include test average “activated carbon” injection rate as well. Proposed § 63.7575. EPA should be clearer regarding application of these requirements.] for dry scrubbers; voltage and secondary current (or total power input) for electrostatic precipitators (“ESP”) at units with a wet scrubber. Id. EPA proposes to define the minimum operating parameter values for these control devices as 90 percent of the test average in order to provide a range around the test average to account for normal variations in the operation of the source and control device. Proposed § 63.7575. Unfortunately, virtually all of these parameters will change with any change in boiler load.

For units with fabric filters, EPA also proposes requiring a BLDS and an alarm time operating limit of 5 percent of operating time over six months. Proposed § 63.7530(b)(3)(iv). Units with an ESP and a dry control system must comply with an opacity limit of 10 percent based on a “daily block average” in lieu of establishing ESP parameters, and units with a dry control system and a fabric filter may comply with an opacity standard in lieu of operating a BLDS. Proposed Table 4. Units with an operating limit or an opacity limit must report any exceedance of that limit as a “deviation.” Proposed §§ 63.7540(a)(1); 63.7550(e). “Deviation” is defined to state that the “entity responsible for enforcement of the standards” [Footnote: EPA should revise the definition to make clear that only the EPA, or a regulatory authority with EPA-delegated authority, has the discretion to determine what constitutes a violation, and that someone acting on authority of the citizen suit provisions of the CAA would not.] determines in its discretion whether a deviation constitutes a violation. Proposed § 63.7575.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Lee B. Zeugin

Commenter Affiliation: Utility Air Regulatory Group

Document Control Number: EPA-HQ-OAR-2006-0790-1957.1

Comment Excerpt Number: 39

Comment: Under EPA’s proposal, units that do not use a wet scrubber (e.g., units with no controls or with a dry scrubber) must comply with an opacity limit of 10 percent based on a daily block average. Proposed 63.7500(a)(2) and Tables 4 and 8. [Footnote: Source owners/operators

can apply to the Administrator for approval of an “alternative opacity emission limit” under 40 C.F.R. 63.6(h)(9). Proposed 63.7570(b)(2).] Units that use an ESP in combination with a wet scrubber (and thus cannot monitor opacity) must comply with operating limits on the voltage and secondary current (or total power input) of the ESP collection plates. Proposed 63.7530(b)(3)(ii). EPA’s proposal to use opacity and ESP voltage and power measurements as enforceable operating limits is flawed. The use of total power is not at all reliable as an indicator of ESP performance or problems. Although opacity can be used as an “indicator” of PM emissions, or as a trigger to initiate corrective action on an ESP, there is not a sufficiently direct correlation between opacity and PM or Hg to justify imposition of an enforceable limit.

For example, it is well known that the relationship between opacity and mass PM (i.e., mass concentration) is affected by the particle size distribution, particle shape, and the color (reflectivity) of the flyash. UARG Comments, EPA-HQ-OAR-2002-0058-0413, Attachment C at 8. Numerous tests have confirmed that western subbituminous coal ash creates considerable opacity at very low flue gas PM mass loading, while eastern bituminous coal has a higher opacity/mass relationship. *Id.* Given these and other variables, the relationship simply is not sufficient to make assumptions based on the proposed opacity operating limit that the PM limit is not being met.

The use of opacity as an operating limit for Hg is even more problematic. Hg is emitted from boilers in three forms - particle bound, oxidized, and elemental Hg. Even if opacity were directly related to PM (which it is not), it would only be sensitive to particle bound Hg. Oxidized and elemental Hg cannot be detected at all by an opacity monitor. *Id.* at 9. EPA has not adequately explained how this tenuous relationship can justify use of opacity as a limit that could create liability for violation of the Hg emission limit.

Finally, EPA’s proposal to require use of ESP parameters has similar flaws. Total ESP power input simply is not directly related to PM removal performance, particularly for the modern multi-section ESPs that are likely to be installed to comply with a proposed MACT. See UARG Comments on Proposed Reconsideration and Revision of New Source Performance Standards, EPA-HQ-OAR-2005-0031-0246 (Mar. 27, 2007) at 21-22, and Attachment 2 (incorporated by reference); UARG Comments EPA-HQ-OAR-2002-0058-0413, Attachment C, Appendix 1. Moreover, none of the ESP parameters are likely to have any relationship to PM at units that also have a wet scrubber, since those systems also are highly effective in controlling high levels of PM coming out of an ESP that is not performing at its intended control efficiency. See EPA-HQ-OAR-2005-0031-0246 at 15-16 and Attachment 2.

In short, while opacity is a useful indicator of ESP problems that should be investigated and corrected, ESP power is not, and the relationship between opacity to stack emissions of PM and Hg is not sufficient to conclude that the emission limit may be exceeded.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Lee B. Zeugin
Commenter Affiliation: Utility Air Regulatory Group
Document Control Number: EPA-HQ-OAR-2006-0790-1957.1
Comment Excerpt Number: 49

Comment: Finally, in the preamble, EPA states that its proposal would require units to conduct an initial and annual test to determine compliance with the CO standard using “either EPA Method 10 or a CO CEMS.” Proposed § 63.7510(c) does state that for units required to use CO CEMS the “initial compliance demonstration . . . is conducting a performance evaluation” of the CEMS.” 75 Fed. Reg. at 32,051(emphasis added). And, proposed § 63.7540(a) (8) requires units with CO CEMS to maintain CO below or at the applicable standard. However, proposed § 64.7530 (addressing demonstration of initial compliance) contains no exception from the requirement to conduct “initial performance tests (performance stack tests and fuel analyses)” and proposed § 63.7515 contains no exception for subsequent performance tests for units with CEMS. If EPA resolves the above issues and promulgates a rule requiring use of CO CEMS to demonstrate compliance, EPA must revise the other provisions to make clear that units required to use CO CEMS are not also subject to performance testing.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Lee B. Zeugin
Commenter Affiliation: Utility Air Regulatory Group
Document Control Number: EPA-HQ-OAR-2006-0790-1957.1
Comment Excerpt Number: 56

Comment: Proposed 63.7550(h) requires reporting of test data to EPA within 60 days after completion of the performance evaluation. 75 Fed. Reg. at 32,062. Section 63.7(g) (applicable under Table 10) states that a performance test is “completed” when the field sample collection is terminated. Although receiving the analytical results of performance tests within 60 days generally is not a problem, it could be a problem for some tests -- like Method 23 for D/F -- that require intense laboratory procedures and for which there may only be a limited number of qualified laboratories. UARG requests that EPA include a provision allowing additional time for submittal of the results of D/F tests, if necessary.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Lee B. Zeugin

Commenter Affiliation: Utility Air Regulatory Group

Document Control Number: EPA-HQ-OAR-2006-0790-1957.1

Comment Excerpt Number: 58

Comment: In addition to the problems discussed above, EPA's proposal contains a number of additional gaps and inconsistencies that make it difficult (if not impossible) to determine what EPA proposes to require. For example:

Proposed 63.7505(d) states that units that "demonstrate compliance with any applicable emission limit through performance stack testing . . . must develop a site-specific monitoring plan according to . . . paragraphs (d)(1) through (4)." 75 Fed. Reg. at 32,050. Paragraphs (d)(1) through (4), address requirements for "each CMS required in this section." However, proposed § 63.7505 does not appear to require any CMS. The only reference to CMS in that section is to the fact that source owners/operators may demonstrate compliance using the CMS "where applicable." As a result, applicability of the requirements in (d)(1) - (4) is not clear.

Proposed 63.7510(a) states that affected sources that elect to demonstrate compliance using performance stack test and that "burn a single type of fuel" are "exempted from the initial compliance requirements of conducting a fuel analysis for each type of fuel burned." 75 Fed. Reg. at 32,051. However, proposed 63.7530(b), which contain the fuel analysis requirements for units demonstrating compliance through performance testing, does not exempt fuel analysis. It only exempts determination of the fraction of total heat input for that fuel type. Proposed 63.7530(b)(1)(iii). As a result, the meaning and applicability of the exception in proposed § 63.7510(a) is not clear.

Proposed 63.7515(g) requires reporting of the "results of performance tests (stack test and fuel analyses)" and either verification that the operating limits for the unit have not changed, or documentation of revised operating parameters according to § 63.7530. It not clear whether a unit that has not changed fuel type or fuel mixture since the last performance test must perform a fuel analysis or can simply verify that the fuel has not changed. Requiring re-analysis if the fuel has not changed is inconsistent with proposed 63.7540(a)(4) and (6). 75 Fed. Reg. at 32,058-59. Proposed 63.7525 requires units with CO CEMS to calculate and record 30-day rolling average emission rate on a daily basis. A new 30-day rolling average is calculated as the average of all hourly CO emissions data for the preceding 30 "operating days." Proposed 63.7525(a)(5). However, the term "operating day" is not defined in the proposed rule or in 40 C.F.R. 63.2.

Proposed 63.7525(c)(7) requires source owners/operators to "determine and record all the 6-minute averages (and 1-hour block averages as applicable) collected for periods" during which the COMS is not out of control. 75 Fed. Reg. at 32,055-56. The reference to "1-hour block" averages is not clear. The proposed rule requires reduction of data to 6-minute averages and compliance with a 24-hour (or daily) block average.

Proposed 63.7525(d)(4) requires determination of the "3-hour block average" of all recorded readings from CPMS. 75 Fed. Reg. at 32,056. Since the rule does not use 3-hour averages, this provision makes no sense.

Proposed 63.7530(b) contains incorrect references for all the proposed requirements. Specifically, it states that units demonstrating compliance through performance stack testing must “establish each site-specific operating limit in Table 2 . . . that applies . . . according to the requirements in § 63.7520, Table 7 . . . , and paragraph (c)(4) or this section.” 75 Fed. Reg. at 32,056. However, proposed Table 2 sets out emission limits for existing boilers and process heaters, not “site-specific operating limits.” Operating limits are in proposed Table 4. Paragraph (c)(4) addresses Hg emission rates from fuel analysis. Paragraph (b)(3) addresses parameter operating. Proposed § 63.7530(b) also states that all such units must conduct fuel analysis and “establish maximum fuel pollutant input levels according to paragraphs (c)(1) through (3). . .” 75 Fed. Reg. at 32,057. Paragraphs (c)(1) through (3) address units that demonstrate compliance through fuel analysis, not through performance testing. Paragraphs (b)(1) through (3) appear to be the procedures for establishing maximum fuel pollutant input levels.

Although UARG does not believe PM CEMS should (or can) be required for compliance determinations under this rule, UARG notes that EPA’s proposed rule, which does provide for use of a PM CEMS, does not exempt those units from the other performance testing and operating limit requirements in proposed 63.7530 and 63.7515. In fact, in the preamble, EPA states that compliance with PM standards is always determined by “initial and annual stack tests . . . using EPA Method 5 or 17.” 75 Fed. Reg. 32,013. This statement is inconsistent with the proposed 63.7510(d).

The references to equation 8 in proposed 63.7530(c)(3) and (c)(4) are incorrect. 75 Fed. Reg. 32,057-58.

Proposed 63.7530(d) identifies a different applicability threshold for the work practice standard than other provisions. According to proposed Tables 2 and 3, and the preamble, the emission limits for existing units apply to units with heat input capacity of “10 million Btu per hour or greater” and the work practice standard applies to units with heat input capacity “less than” 10 mmBtu/hr. 75 Fed. Reg. at 32,012. Proposed § 63.7530(d) on the other hand refers to units with heat input capacity of “10 mmBtu per hour or less.” 75 Fed. Reg. at 32,058. EPA should correct this inconsistency.

Almost all of the equation references in proposed § 63.7540(a)(3) - (6) are incorrect. 75 Fed. Reg. at 32,058-59.

Proposed 63.7540(a)(4) incorrectly references § 63.7530(c) as the provision for establishing operating limits for units that demonstrate compliance through performance testing. 75 Fed. Reg. at 32,058.

Although proposed § 63.7515(e) requires all units subject to work practice standards to perform a “tune-up” annually, proposed § 63.7540(a)(11) states that boiler and process heaters with heat input capacity less than 10 mmBtu/hr must perform “tune-ups” biennially. 75 Fed. Reg. at 32,052, 32,059.

Proposed Tables 1 and 2 do not identify the different averaging periods for compliance with the PM limit at units with and without PM CEMS. 75 Fed. Reg. at 32,066-68.

The prefatory language to proposed Table 3 says “as stated in §§ 63.11202 and 63.11203.” The referenced sections do not appear in this proposed subpart. 75 Fed. Reg. at 32,068.

Proposed Table 9 refers to a startup, shutdown, and malfunction plan that is not required elsewhere in the rule. 75 Fed. Reg. at 32,073.

EPA should issue a supplemental proposal correcting the numerous inconsistencies and incorrect cross-references so that commenters know what EPA is proposing and can develop responsive comments.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Lee B. Zeugin

Commenter Affiliation: Utility Air Regulatory Group

Document Control Number: EPA-HQ-OAR-2006-0790-1957.1

Comment Excerpt Number: 61

Comment: As discussed above, the Agency identified five basic types of units as subcategories for the three HAP groups that EPA termed fuel-dependant (i.e., PM, HCl and Hg). However, we do not believe EPA’s analysis was sufficiently detailed, especially with respect to PM emissions. For coal-fired units, EPA subsequently identified three additional subcategories for organic emissions: (1) pulverized coal (PC) units; (2) stokers designed to burn coal; and (3) fluidized bed units designed to burn coal. The way the coal is prepared/processed for these three types of furnaces is fundamentally different. While potential PM (fly ash) emissions may be fuel dependent, an identical PM control technology (e.g., electrostatic precipitator) will perform quite differently on a stoker unit as compared to a PC unit. For a PC unit, the fuel must be ground to a fine powder (i.e., pulverized) in the coal mills before being blown into the furnace. On the other hand, stoker boilers take in much larger-sized pieces of coal. Because PC units require the fuel to be so fine, the PM emissions are more difficult to control. Likewise, fluidized bed units require yet a different coal preparation and also require the addition of limestone to the combustion bed. The characteristics of fluidized bed combustion yield uncontrolled PM emissions that are different from both PC units and stoker boilers. Because these different types of units process the coal differently, their PM emission characteristics are fundamentally different. For example, a baghouse installed on a stoker unit could reduce PM emissions to a level that is barely measureable. On the other hand, that same baghouse installed on a similarly-sized PC unit would have higher PM emissions simply because finer coal particles are required by the PC burners. We do not believe the Agency adequately addressed this issue; rather, EPA appears to have simply assumed that all three furnace types should be treated equally with respect to the PM emission limit for coal combustion.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Alicia Oman

Commenter Affiliation: National Association of Manufacturers

Document Control Number: EPA-HQ-OAR-2006-0790-2234.1

Comment Excerpt Number: 64

Comment: There are several compelling reasons for setting HBELs for HCl and manganese in the Industrial Boiler MACT.

Section 112(d)(4) is a tool that enables EPA to match the stringency of a HAP emissions limitation to the level determined necessary to fully protect human health. As a result, the standard is no more stringent and no less stringent than needed to get the job done. As EPA explains in the proposed rule, 112(d) generally requires MACT emissions limitations to be set at a level that reflects the performance of the better performing sources in the given source category or subcategory. Section 112(d)(4) provides an alternative to this basic approach for pollutants for which a health threshold has been established. For such pollutants, 112(d)(4) authorizes EPA to “consider such threshold levels, with an ample margin of safety, when establishing emission standards” under 112(d).

The default technology-based method of setting MACT standards is a cookie cutter approach that can and does result in HAP emissions limitations that go well beyond what is needed to protect the public from HAP emissions. The clear purpose of 112(d)(4) is to prevent this from happening. The legislative history of 112(d)(4) is abundantly clear on this point. In formulating 112(d)(4), Congress recognized that, “For some pollutants a MACT emissions limitation may be far more stringent than is necessary to protect public health and the environment.” [Footnote: S. Rep. No. 101-228 (1990) at 171.] As a result, 112(d)(4) was provided as an alternative standard setting mechanism for HAPs “where health thresholds are well-established ... and the pollutant presents no risk of other adverse health effects, including cancer....” [Footnote: S. Rep. No. 101-228 (1990) at 171.]

When the first Industrial Boiler MACT was promulgated in 2004, it included health based emissions limitations for HCl and manganese. Under both of these standards, a site-specific risk assessment had to be conducted to prove that emissions from the site were low enough that human health would be protected, with an ample margin of safety. Actual emissions testing of all affected emissions points was required to verify the emissions rates used in the risk assessment. All relevant site parameters were required to be recorded in the site’s Title V operating permit to provide assurance over time that public health would be adequately protected. [Footnote: See, generally, 69 Fed. Reg. 55218, 55227-55228 (Sept. 13, 2004).]

In short, these health-based emissions limitations were rigorous standards that demanded accountability. At the same time these standards were a winner for affected sources because the standards would not have blindly required emissions to be reduced far below the levels needed to assure that the public was protected. It was estimated at the time that these health based standards would have saved over \$2 billion in compliance costs, as compared to the technology-based standards that otherwise would have applied. The first Industrial Boiler MACT was overturned by the D.C. Circuit, but on grounds unrelated to the health based emissions limitations. Notably, in defending the health based emissions limitations, the Department of Justice concluded that, “Environmental Petitioners’ claim that the statute precludes EPA from establishing alternative standards for threshold pollutants (which petitioners mischaracterize as an exemption) is meritless.” [Footnote: Final Brief For Respondent United States Environmental Protection Agency, D.C. Cir. Case No. 04- 1385 (Dec. 4, 2006) at 53-54.]

Giving full consideration to the use of health-based standards is particularly important in the wake of the series of decisions from the D.C. Circuit that have progressively limited EPA’s discretion to make common-sense decisions when setting MACT standards under 112. EPA’s authority to set health based standards under 112(d)(4) is unassailable. For appropriate HAPs and where the relevant facts substantiate its use, EPA can set health-based standards with full confidence that they will survive judicial review.

In light of the exceedingly stringent proposed MACT emissions limitations for HCl and metals (including manganese), it is arbitrary and capricious for EPA not to develop HBELs for these pollutants

While EPA has discretion in deciding whether to set HBELs under 112(d)(4), the Agency cannot be arbitrary and capricious in making such a decision. The proposed HCl and PM emissions limitations for all types of industrial boilers are exceedingly stringent. Affected sources will have to spend tens of millions of dollars in order to meet the standards and, as even EPA predicts, a significant number of existing units simply will not be able to meet the standards and will be required to shut down. In addition, the work that EPA performed in support of the HBELs included in the 2004 rule demonstrates that the proposed standards are far more stringent than needed to assure the protection of public health with an ample margin of safety. The costs and burdens on affected sources and the degree of control needed to provide adequate health and environmental protection are both key factors that should be considered by the Agency in deciding whether to adopt HBELs in the Industrial Boiler MACT.

In the proposed rule, EPA completely ignores these factors. The Agency’s discussion of HBELs includes no assessment whatsoever of the costs that might be avoided by adopting HBELs for HCl or manganese. As to potential effects on health or environment, EPA simply raises implementation questions and asserts a lack of information to resolve the questions. Such an approach is facially inadequate in light of the extensive policy, scientific, and technical assessment developed in support of the HBELs in the 2004 Industrial Boiler MACT standard. In short, EPA’s failure to fully consider key factors that are relevant to making an informed decision as to whether HBELs should be adopted is arbitrary and capricious.

EPA has failed to provide a rational basis for ignoring and contradicting the findings made in support of the HBELs included in the 2004 Industrial Boiler MACT rule

EPA asserts in the proposed rule that its decision to not propose HBELs “is not contrary to EPA’s prior decisions where we found it appropriate to exercise the discretion to invoke the authority in section 112(d)(4) for HCl, since the circumstances in this case differ from previous considerations.” 75 Fed. Reg. 32032. In contrast to “other source categories for which EPA has exercised its authority under section 112(d)(4),” EPA explains that boilers and process heaters are more likely to be co-located with other HAP sources and are often located in heavily populated urban areas where many other HAP sources exist. *Id.* The Agency concludes that, “These factors make an analysis of the health impact of emissions from these sources on the exposed population significantly more complex than for many other source categories, and therefore make it more difficult to establish an ample margin of safety.” *Id.*

These assertions fail to reflect the fact that the industrial boiler source category is one of the few categories where EPA has previously “found it appropriate to exercise the discretion to invoke the authority in section 112(d)(4).” *Id.* As a result, EPA has already drawn conclusions as to how to deal with possible co-location with other HAP sources and how to appropriately consider HAP emissions from other nearby sources. These are not issues of first impression generally or in the specific context of industrial boilers and process heaters. The questions have been asked and answered in 2004 in the context of notice and comment rulemaking for the industrial boiler and process heater source category.

Thus, EPA is mistaken in asserting that its decision not to propose HBELs is “not contrary to EPA’s prior decisions.” *Id.* The decision not to propose HBELs is flatly inconsistent with EPA’s prior determination that HBELs are appropriate and justified for the industrial boiler and process heater source category. EPA’s failure to acknowledge its prior determination and failure to explain why it has raised as questions issues that previously were resolved (such as how to consider co-located HAP sources and nearby HAP sources) render its decision not to propose HBELs arbitrary and capricious.

The co-benefits of collateral non-HAP emissions reductions cannot be used to justify a decision to ignore HBELs.

EPA explains in the proposal that “it considered the fact that setting conventional MACT standards for HCl as well as PM (as a surrogate for metals including manganese) would result in significant reductions in emissions of other pollutants, most notably SO₂, non-consensable PM, and other non-HAP acid gases (e.g., hydrogen bromide) and would likely also result in additional reductions in emissions of mercury and other HAP metals (e.g., selenium).” 75 Fed. Reg. 32032. The Agency notes in particular that its belief that the rule will result in the reduction of up to 340,000 tons per year of SO₂, which it characterizes as “substantial reductions with substantial health benefits.” *Id.* EPA asserts that Congress acknowledged the possibility that MACT standards would result in collateral non-HAP emissions reductions and, therefore, that “the Agency may consider such benefits as a factor in determining whether to exercise its discretion under section 112(d)(4).” *Id.*

EPA is mistaken. Consideration of non-HAP collateral emissions reductions is impermissible in setting MACT standards. Section 112(d)(2) provides an express list of factors that EPA may consider in setting § 112(d) standards – including “the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements.” This list does not allow consideration of non-HAP air quality benefits, such as the co-benefits of reducing PM_{2.5} emissions. This restriction is an unambiguous command that EPA should not consider non-HAP air quality benefits in setting standards under § 112(d). This prohibition extends of necessity not only to rules that literally list a criteria pollutant as a HAP but also to any rule that in effect treats a criteria pollutant as a HAP. *National Lime Ass’n v. U.S. EPA*, 233 F.3d 625, 638 (D.C. Cir. 2000).

By basing its rejection of the health-based approach for Boiler MACT on the co-benefits of criteria pollutant reduction, EPA is in effect unlawfully treating a criteria pollutant as a HAP. EPA’s action here is not the simple use of a criteria pollutant as a surrogate for a HAP, which courts have upheld as long as EPA proves the scientific underpinning of the surrogate relationship. *Id.* Rather, EPA argues directly that it is the reduction in criteria pollutant emissions that causes it to reject the health-based approach. This EPA cannot do. [Footnote: Moreover, criteria pollutants from boilers are strictly regulated elsewhere under the Clean Air Act through New Source Performance Standards and other provisions of the Act.]

EPA’s sole support for its “collateral benefits” theory is legislative history -- the Senate Report that accompanied Senate Bill 1630 in 1989. But the D.C. Circuit rejected precisely the same argument in *National Lime*. In that case, EPA supported its argument regarding particulate matter as a surrogate for HAP metals by referring to the same Senate Report discussed above. The court rejected EPA’s argument, noting that the Senate Report referred to an earlier version of the statute that was ultimately not enacted, and hence was irrelevant:

The final statute, by contrast, unqualifiedly prohibits listing a criteria pollutant as a HAP, that is, regardless of the reason. Because the comment in the Senate Report regarding PM and metals was made before the blanket prohibition upon regulating PM as a HAP was added to the statute, the report is irrelevant to our construction of 7412(b)(2) as enacted.

National Lime at 638. Similarly here, EPA cannot use the language of a Senate Report that did not reflect the language of the statute as enacted to support its co-benefits theory and rejection of the health-based approach.

Moreover, even if it were relevant, the language in the Senate Report cited by EPA appears to address only area-source GACT standards under Section 112(d)(5), and therefore is not relevant to interpretation of MACT standards under Section 112(d)(2) or the health based alternative under Section 112(d)(4). And, in the final analysis, “it is the statute, and not the Committee Report, which is the authoritative expression of the law.” *City of Chicago v. Env. Defense Fund*, 511 U.S. 328, 337 (1994). Here, the statute clearly provides that MACT standards may address only HAPs, not criteria pollutants. See *National Lime Ass’n* at 638.

But, even if it were not unambiguously prohibited, consideration of non-HAP air quality benefits under 112(d)(4) would be unreasonable. *National Ambient Air Quality Standards* (“NAAQS”)

are in place for all relevant pollutants, including ozone, SO₂, and PM. A MACT standard is a very imprecise tool for helping to attain and maintain such NAAQS because it imposes across-the-board requirements in circumstances where tailored solutions are needed. Each area has its own unique mix of sources and its own particular needs in terms of what reductions are needed and where such reductions should be achieved. SIP-based air quality programs provide the needed flexibility to design a program that effectively addresses local air quality needs. MACT standards are an unreasonably blunt instrument for dealing with non-HAP air quality issues.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Patrick J. Medvecz

Commenter Affiliation: Wausau Paper Corp

Document Control Number: EPA-HQ-OAR-2006-0790-2283

Comment Excerpt Number: 3

Comment: Under the proposed Boiler MACT rule, affected facilities are required to install multiple air pollution control devices to reduce the emissions of five different pollutants of concern: particulate matter, hydrochloric acid, mercury, dioxin/furan and carbon monoxide. EPA has issued many MACT rules, but has changed the rules of the game for industrial boilers. EPA established emission limits for each of the individual pollutants by being selective as to which data were used to calculate the emission limit. This approach biased the resulting limits to inordinately low levels.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Christy Sammon

Commenter Affiliation: Southeastern Lumber Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1954.1

Comment Excerpt Number: 5

Comment: The Agency is not compelled to issue numerical limits for a particular constituent. It can use work practices, or it can conclude that the emissions are insignificant in the context of its duty to address 90% of the designated urban air toxics. For instance, in general, the data for chlorinated dioxins for biomass boilers are non-detect. The Agency could have concluded that the data indicated that numerical limits were not necessary because of the apparently insignificant levels of emissions, however, the Agency proposed unreasonable numerical limits based on the non-detect data. The unreasonableness of the limits is demonstrated by the fact that the proposed chlorinated dioxin limits for some biomass boilers are 100 times lower than the

existing limits for hazardous waste incinerators, which should be the most stringently regulated of all combustion devices.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Winslow Sargeant

Commenter Affiliation: U.S. Small Business Administration

Document Control Number: EPA-HQ-OAR-2006-0790-2020

Comment Excerpt Number: 6

Comment: EPA Should Provide More Flexibility for Emissions Averaging.

EPA should have proposed an emissions averaging program more in line with what SERs requested rather than the restricted program outlined in the proposal. Emissions averaging is an option for individual facilities that have multiple affected sources on site that saves money and obtains the identical or better emission reductions. By allowing these facilities to average emissions across various affected units, they can focus their investments on the units that will provide the biggest environmental impact per dollar spent, rather than targeting every affected unit to meet a single limit. This approach has the potential to produce a greater emissions reduction than requiring each individual source to meet the standard, while reducing the cost of compliance to the facility, and has been successfully utilized in several proceeding rulemakings. In the proposed rule, EPA limits the flexibility and potential effectiveness of emissions averaging by placing overly strict limitations on a facility's ability to employ averaging.

First, EPA should base the emissions averaging option on actual operating times and emissions rather than on design capacity of affected units. This would have provided more flexibility for facilities that have backup units or other limited use boilers, especially since EPA chose not to create a limited use subcategory. Second, EPA should not have limited the option to encompass only those sources which fall into the same subcategory based on fuel type. This requirement is unnecessarily restrictive and severely limits the flexibility of emissions averaging. Finally, the 10 percent penalty for choosing emissions averaging is again unnecessarily restrictive and again severely limits the flexibility of emissions averaging. Furthermore, EPA waives the penalty for facilities that average across units emitting from the same stack within a facility, despite the fact that the total emissions from units emitting from the same stack are identical to emissions from units emitting from separate stacks as long as all else is held constant.

Advocacy urges EPA to reconsider the emissions averaging option and to remove the impediments to small entities using it as a viable flexibility option that are outlined above, and similar to previous rules adopted by the Agency. EPA should return to the more basic emissions averaging concept that was discussed during the panel and which the panel report unanimously recommended as an important flexibility option.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Scott Manley

Commenter Affiliation: Wisconsin Manufacturers and Commerce

Document Control Number: EPA-HQ-OAR-2006-0790-2258.1

Comment Excerpt Number: 8

Comment: In light of extensive data sourcing and quality problems, EPA's standards are arbitrary and capricious. We believe the data that EPA gathered to support these rules reflects bias, is incomplete, and is fundamentally flawed. EPA's data collection efforts to support these rules were biased toward so-called "top performing facilities." EPA directed its information requests to units that it had reason to believe were the better performing units in each subcategory. This tainted sample has resulted in proposed standards that are inordinately stringent, not representative of the overall subcategories to which they apply, and not in accord with the legal standards.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: A. Steven Young

Commenter Affiliation: Association of Independent Corrugated Converters

Document Control Number: EPA-HQ-OAR-2006-0790-1994.1

Comment Excerpt Number: 9

Comment: In light of extensive data sourcing and quality problems, EPA's standards are arbitrary and capricious. We believe the data that EPA gathered to support these rules reflects bias, is incomplete, and is fundamentally flawed. EPA's data collection efforts to support these rules were biased toward so-called "top performing facilities." EPA directed its information requests to units that it had reason to believe were the better performing units in each subcategory. This tainted sample has resulted in proposed standards that are inordinately stringent, not representative of the overall subcategories to which they apply, and not in accord with the legal standards.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Charles B. Jones, III

Commenter Affiliation: Georgia Traditional Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1923.1

Comment Excerpt Number: 15

Comment: use the existing source emission limits on the actual emissions achievable by the best 12% of performing sources, not on an unduly conservative theoretical individual pollutant-by-pollutant set of emission limits. See Sections A and B above.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Alicia Oman

Commenter Affiliation: National Association of Manufacturers

Document Control Number: EPA-HQ-OAR-2006-0790-2234.1

Comment Excerpt Number: 17

Comment: EPA arbitrarily and capriciously failed to collect adequate data upon which to promulgate this rule.

EPA has been working on the Industrial Boiler MACT standards in one fashion or another for better than 15 years and has been abundantly aware of the need to set these standards since the 1990 Clean Air Act Amendments were enacted almost 20 years ago. Despite this long run-up to the proposed rule, the Agency has a paucity of data available to set the existing source standards.

EPA's Tables 2 and 3 in the preamble make clear just how sparse are the data underpinning the proposed rule. Using biomass-fired boilers as an example, Table 2 shows that the subcategory includes 420 sources, yet EPA has emissions testing data on 192 units for PM, 91 units for mercury, and 92 units for HCl – 46%, 22%, and 22% data availability, respectively. The numbers are much lower for many other pollutants and subcategories. 75 Fed. Reg. 32022 – 23. The relative lack of data is a fundamental problem, because EPA construes the statute as requiring it to set existing source MACT floors based on the top performing 12% of sources for which it has data for the larger source categories and subcategories. Less data means the pool from which the top 12% is drawn is smaller and, therefore, the actual number of sources used to determine the MACT floor is smaller.

Without apparently knowing whether the limited available data is statistically representative of the entire subcategory (such that calculating the MACT floor with fewer sources would result in approximately the same value as the MACT floor using data from the entire subcategory), then it must be presumed that the lack of data likely significantly skews the true results. However, the proposed rule and supporting documentation provide no assurance that the limited available data are representative of the entire source category. As a result, we have no way to know if the available data are producing a MACT floor that is reflective of the subcategory as a whole. In

fact, as discussed below, there is every indication that the data are severely and inappropriately skewed. Thus, the lack of data call into question the validity of the MACT floor determinations and resulting MACT standards.

While it is true that the statute allows EPA to determine the MACT floor based on sources “for which the Administrator has emissions information,” this provision does not excuse EPA from using its resources and legal authority to obtain a reasonable and reliable sample and as much information as it reasonably can prior to setting MACT standards. In this case, EPA has had 15 to 20 years to gather the requisite information. The fact that, at this point, data on only a small subset of sources in each subcategory is available represents an abdication of EPA’s responsibility and renders the resulting standards arbitrary and capricious.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Scott Manley

Commenter Affiliation: Wisconsin Manufacturers and Commerce

Document Control Number: EPA-HQ-OAR-2006-0790-2258.1

Comment Excerpt Number: 3

Comment: EPA should also establish annual tune-up work practice as the MACT standard for biomass boilers. For example, in the forest products industry alone, the estimated cost of complying with the proposed HAP emissions limitations for biomass boilers is \$3.3 billion. This is an extraordinary cost that, in the context of the forest products industry, equals or exceeds the magnitude of the economic burden that EPA predicts for the Gas 1 subcategory. Similarly severe economic impacts are expected in other industry sectors where biomass boilers are widely used, such as the furniture and agricultural products industries. Thus, there is strong economic justification for prescribing work practice standards for biomass boilers in lieu of numeric emissions limitations.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Patrick J. Medvecz

Commenter Affiliation: Wausau Paper Corp

Document Control Number: EPA-HQ-OAR-2006-0790-2283

Comment Excerpt Number: 7

Comment: The Rhinelander stoker boilers have a new baghouse (which is the recommended control technology for particulate matter) and emissions results are still over the proposed limit for particulate matter.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Troy Runge

Commenter Affiliation: Wisconsin Bioenergy Initiative

Document Control Number: EPA-HQ-OAR-2006-0790-2245

Comment Excerpt Number: 7

Comment: Finally, EPA should not penalize emerging biomass fuels. Several of the existing and new source limits for biomass are extremely low because the baseline of emissions is very low compared to other fuels. Emissions of mercury, dioxin and hydrochloric acid are present in very small amounts in wood and are minor sources of these HAPs, yet the costs to achieve these very low levels becomes exponentially more expensive and essential only serves to eliminate the use of these fuels.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Steven A. Brink

Commenter Affiliation: California Forestry Association

Document Control Number: EPA-HQ-OAR-2006-0790-2026.1

Comment Excerpt Number: 8

Comment: The proposed Particulate Matter (PM) standard of 0.008 lb/MMBtu does not account for the variability of performance of electrostatic precipitators on biomass fired boilers.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Trent A. Dougherty

Commenter Affiliation: Ohio Environmental Council

Document Control Number: EPA-HQ-OAR-2006-0790-1922.1

Comment Excerpt Number: 8

Comment: These proposed rules can and should be fuel source criteria- forcing by requiring the same requirements for all generators, including biomass. Owners and operators of biomass facilities if faced with stronger emissions limitations would be diligent in researching the source of their biomass and whether one stock contains more toxics than another source readily available. Incorporating clean and sustainable biomass source would be the natural product of this regulation.

For example, using PM as a surrogate for non-mercury metallic HAPs is reasonable under ideal fuel sourcing is illegitimate under the current sourcing. It is not beyond the realm of possibility that without sourcing criteria, biomass power generation may use secondary wood sources such as processed wood, and perhaps even construction and demolition debris, which will generate similar levels of particulates as raw wood, but may contain increased concentrations of metals such as arsenic, chromium, lead and additional mercury compared to raw wood fuel stocks. Coupled with an overly narrow and thus less than protective definition of “solid waste,” a large portion of these non-mercury metallic HAP emissions could go unmonitored.

Further, with the average heat content for Wood Pellets being 13.6 Million Btu/ton, Seasoned firewood being 15.3 million Btu/ton and Bituminous coal being 26 million Btu/ton. Therefore, the proposed major source MACT thresholds for PM 0.02 lb/ MMBtu for biomass and coal on a heat input basis are going to lead to greater PM emission levels for biomass.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Steven A. Brink

Commenter Affiliation: California Forestry Association

Document Control Number: EPA-HQ-OAR-2006-0790-2026.1

Comment Excerpt Number: 9

Comment: The proposed Hg standards for existing and new Major Sources do not account for expected variability of Hg contained in biomass wastes. Compliance could require the add-on control of activated carbon injection or carbon beds, neither of which has been demonstrated with biomass combustors and both are likely to be cost prohibitive.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Steven A. Brink

Commenter Affiliation: California Forestry Association

Document Control Number: EPA-HQ-OAR-2006-0790-2026.1

Comment Excerpt Number: 10

Comment: The proposed HCl standards for both existing and new Major Sources of 0.006 and 0.004 lb/MMBtu do not account for the variation in biomass waste chlorine content. California, Placer County Air Pollution District, test data has shown emissions ranging from 0.005 to 0.013 lb/MMBtu for existing sources using forest and urban woody waste.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Steven A. Brink

Commenter Affiliation: California Forestry Association

Document Control Number: EPA-HQ-OAR-2006-0790-2026.1

Comment Excerpt Number: 11

Comment: CFA does not believe the dioxin proposed standard is warranted. According to the California, Placer County Air Pollution District Officer, data from biomass boilers has not shown a correlation between dioxin and CO emissions.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Other - Out of Scope Comments

Commenter Name: Jeff Borling

Commenter Affiliation: APEX, Director of Itasca Business Development

Document Control Number: EPA-HQ-OAR-2006-0790-0063

Comment Excerpt Number: 1

Comment: In our region and across all other cold-weather states with vast timber resources, much of our energy consumption comes in the form of burning oil and propane for heat (we have limited natural gas resources). By converting these fuel sources to woody biomass, we have an opportunity to reduce our carbon emissions and utilize a locally-produced, carbon-neutral fuel source that will help sustain our struggling economy.

Unfortunately, the prices of these wood fuels are somewhat higher than fossil fuels, so the impetus for consumers to convert must rely on the environmental benefits alone. The EPA's recent action has called those environmental benefits into question and we are seeing planned biomass-for-heat projects put on hold while this is all sorted out. Make no mistake: these

consumers will continue to heat their buildings under the EPA's new implications, but they will continue to do so with oil and propane, not wood.

Environmental and forestry groups have set Minnesota's sustainable harvest limit at 5.5 million cords of wood a year. At our peak, we consumed only 3.7 million cords a year, leaving an excess capacity of nearly 2 million cords of wood to grow freely in our forests each year, all of which would continue to absorb carbon from the atmosphere. Since this peak consumption period in the late 90s, the downturn in the housing market has drastically reduced the volumes of wood harvested from our forests each year, to where we are now leaving more than half our sustainable harvest capacity in the woods.

Not only will these excess forest resources capture more carbon than is released by all the current and planned biomass-for-heat projects combined, they also present other unique issues when left in the woods. When our forests are not harvested efficiently, they decay and release methane long after their growth cycles have reduced the amount of carbon they absorb. We also have significant fire danger in this area with historic forest fires that rival the largest in the nation. If industry demands don't warrant the efficient management and thinning of our woods, they will burn. We would rather see them burn in efficient boilers that would otherwise burn oil or propane to produce necessary heat.

As traditional forest products industries continue to decline, we can expect to see more and more timber left to rot or burn in the woods. Unless action is taken to support conversion to woody biomass fuels, cold weather states like ours will not see growth in the renewable energy sector of our forest products industries, and the challenges of mismanaged, underutilized forests will continue to grow. We need the EPA to confirm the status of woody biomass fuels as a carbon-neutral energy source, so that we can see continued economic and environmental benefits of converting our fuel consumption off of fossil fuels and onto renewable sources.

Response:

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 1

Comment: More than a hundred of our supporters who live in and around L.A. wanted to share comments with you today but couldn't make it to the hearing in person. I'd like to read some of these comments now.

Scott McKinsey, Los Angeles, California: The health of L.A.'s residents must be a greater priority to the EPA than corporate inconvenience or profit reductions. Our economy always recovers, but our children sometimes don't. J. Christine Schneider of Los Angeles, California, says: As a physician I witness the ill effects of air pollution in my patients. It is a huge public health issue, not only in regards to the compromised health of millions of individuals, but also in terms of health care costs. Please forge ahead with regulations that will continue to decrease the level of toxic pollutants in the area.

Nadja West of Hemet, California, says: I ived in Los Angeles for years and though I have never smoked, I now have terminal lung cancer. I didn't use drugs, medicinal or otherwise, live with a smoker or indulge in any unhealthy practices. I had an interest in nutrition and ate well. No one else in my family has had lung cancer, but they didn't live in L.A. Please reduce air pollution in an effective way, quickly.

Rhonda Mumphrey of Lakewood, California, says: I am currently under a doctor's care for having metal poisoning. I have a ten-year-old that I would like to protect from this. Even as I go through my treatments, I can see nearby factories spewing chemicals into the air. The EPA is supposed to protect us from big polluters.

Jeanne Fobes of Newport Beach, California, says: I am a grandmother who is terribly concerned about the air quality that my grandchildren are and will be breathing. Two of them have multiple chemical sensitivity, probably, as a result of toxins in their air and in their food and who knows where else. We must take seriously our obligation to clean up our environment, especially the air we breathe. Please don't let anything deter you from this effort.

Hank Schlinger of Burbank, California, writes: Dear EPA, my wife is pregnant with our first child and I would like him to grow up in a city with cleaner air. Please maximally reduce emissions of toxic air pollutants like mercury, lead, and dioxins from boilers, process heaters, and incinerators. Rebecca Barker of Glendora, California says: It only takes one loophole, like the fact that thousands of facilities may burn solid waste without safeguards to protect public health, to poison the air we breathe every day. I strongly encourage the EPA to close such loopholes and ensure that the public has mechanisms in place that will allow communities to be informed of emission activities in the area. Informed communities are safe communities. Kirk Margo of Granada Hills, California, says: Don't let big polluters trash our lungs and endanger the health of our hearts. It's time to clean up this city and this great country we all live in. Diana Woods says: We as Americans depend on, rely on, and fully expect the EPA to do the job they were created to do and create and enforce strict regulations for these corporate polluters. And finally, Craig Kleber of Los Angeles, says: Our air is our health.

Mr. Cleber's words, simple as they are, couldn't be more true. Our air is our health and we desperately need you, the protectors of air quality, to make sure we can keep breathing. The important work of the EPA is nothing short of the nexus between the health of the public and the industries whose operations endanger it.

Response:

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 10

Comment: ARI is a technology development firm, and I'm here to talk about deconstruction and demolition waste for materials and lead-based paint. Currently, EPA policies are interfering with useful recycling recovery of a lot of different kinds of waste. And I want to share with you a specific example of how some of these policies, if they were implemented in a smarter way, would result in better protection of human health¹ and the environment.

There was congressional funding provided to the U.S. Army Corps of Engineers Construction Research Engineering Laboratory and ARI to develop a holistic method for dealing with these 100 million plus square feet of World War II buildings that have to be taken down eventually. Most of these buildings were repeatedly painted with lead-based paint. And the presence of that paint is causing difficulties in the effective recycling of these buildings.

One two-story barracks in the Army, just the siding contains about 215 pounds of leachable lead. Because of the difficulties that lead is introducing, these buildings are simply being smashed and hauled off to the landfill. And because the average weight of the building is taken into account, all of this lead is going into the landfill in a leachable form. It is hazardous. But because of the way that the policies are implemented, this stuff is still going in the landfills. In Fort Ord alone, 210,000 pounds of leachable lead went into landfills because we were not able to recover and recycle these buildings. Now, we developed a process where we could economically deconstruct the army barracks, reprocess the used lumber to produce a value-added product. And I've got examples here. This is an example of the siding that comes off of these buildings, and that can then be reprocessed by removing the lead into very valuable wood products. Then the shavings can be thermally processed to concentrate the lead into a product which is higher grade than lead ore going into smelters. That material has a value of \$415 per ton and can then be sent to a smelter for reprocessing. In this way, we're taking old materials from the buildings, diverting it from the landfills and, including recycling the lead itself, keeping all of that material out of landfills.

So, this process was demonstrated, both at Fort Ord here in California, Fort Lewis in Washington, and Fort Chaffee in Arkansas. The process is safe. It conforms to all existing emission standards for hazardous waste incinerators. The lead is very easy to control because it's all a particulate and it's not volatile. This can be performed on-site with mobile equipment. We could recover millions and millions of more feet of old growth timber because this was the highest quality timber that went into these buildings. And again, this diverts 100 percent of the materials away from landfills, produces a value-added product and recovers and recycles the lead itself.

Now, EPA policy is preventing this process from being implemented by how the regulations affect or are implemented towards lead. So we are promoting the demolition -- well, the policies are promoting the demolition and the landfilling of hazardous materials rather than the responsible management of these materials. Even though there is a hazardous component, it can be effectively controlled and recovered, and again, kept out of the environment by recycling it.

So this is resulting in literally thousands and thousands of buildings being sent to the landfill when, in fact, materials like this can be made out of them. So I think EPA can better fulfill its mission of protecting human health and the environment by modifying the classification of

materials, even if some of them exhibit hazardous characteristics, and by simplifying the permitting process for addressing these.

I'm not suggesting that we ease emission standards for these things, but take a closer look on a case-by-case basis to address some of these specific things where we can really do good things and keep hazardous materials out of landfills. Recycled Army Barracks contains lead-based paint has gone through a process to remove the lead-based paint and create this kind of product. Those shavings and the paint are then thermally processed, yes, to concentrate the lead.

And again, it results in a material that consists of 30 percent lead by weight, which is a higher value than lead ore which is being smelted. So it actually has some value. It is being legitimately recycled. The EPA kind of has a presumption of sham recycling. And, in many cases, it's true, but not in this case, and I think not in many cases.

Response:

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 20

Comment: Biomass offers important atmospheric carbon advantages. We share the consensus opinion that biomass is carbon neutral, but beyond that, many of these facilities are associated with wood products production. And those -- you know, those are a good source of not only -- they're a source of carbon sequestration. A 2X4 goes in a building and it's a source of carbon sequestration for some time. An analysis of our carbon footprint shows that we're carbon neutral or actually net carbon storage, and we expect to be that way for some time.

Response:

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 47

Comment: We've recently earned Sustainable Forestry Initiative certification for both our paper mill and box plant products. Nearly 90 percent of the energy used at the mill comes from renewable resources. We have reduced water consumption by one-third since 2005 and continue to decrease our electrical consumption since the year 2000.

In total, we have reduced our greenhouse gas emissions in the state of Washington by more than half since the year 2000. We are a founding member of the Climate Registry and the first North

American pulp and paper mill with a Certified Greenhouse Gas Inventory. In fact, later this week, we will be accepting an award at the Climate Registry associated with our inventory efforts. Not only are our operations sustainable but so are our products. We make products with high-recycled content for quick-service restaurants and grocery bags, and also reducing packaging weight by making a product called FibreShield.

Response:

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 65

Comment: Our organization was founded over years ago when we found out we had two superfund sites in our backyard.

I think at that time people believed that government officials and regulators were doing their jobs, and if these facilities were dangerous, then we wouldn't be allowed to be near them or they wouldn't be allowed to be near us. And what we found was a lot of us don't even know that proceedings like this are going on unless you happen to be connected to a network like we are and you have some good mentors who can help you navigate some of these important rule-makings and some of the legislation that goes on in Sacramento with all of these lobbyists just really pushing for greed and what their needs are and really not looking at what we've done to our plant as a whole. And we've spent a lot of our time, when we're not working on our own community issues, trying to look at policy issues that can effect change; change that maybe won't come to communities that don't have such a fantastic youth that want to be involved and directors and assistant directors who can spend a great deal of their time away from their families and working on issues that, quite honestly, somebody should have been taking care of a long time ago.

Regardless, we're here. We're here now and we offer elbow grease and brain-storming sessions and ways that we can change the direction that we're going in as a society, and what we're doing to our plant. Our planet is devastated. Especially here in the Los Angeles area, we can't have any more air pollution. We need to keep working on the reduction. We're never going to reach attainment.

And we have shenanigans going on down here where people are making up this pollution trading thing-y so that they can, you know, sneak a new emission industry facility here, a new one there.

Response:

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 67

Comment: My husband is a small business owner, so it's not like I'm not business-owner friendly, but we don't need people having a free reign at what they decide is something to put into our air or not, and to simply trade off one source of pollution for another.

You've heard many people talk about --these emissions just don't disappear. They end up in our lungs and in our children. On the way down here we were trying to explain to our youth a little bit about what these hearings are about. And I explained that I'm pretty much an old woman now, you know. And some of the impacts that I might receive, I'm probably going to outlive them. But these guys know and that's what we're talking about.

We can't necessarily go back and recover some of the damage that we've caused but we can stop. We can stop and we can remember that the planet has much more time for other people besides ourselves. And that doesn't even really get into the other species that try to share this planet with us. So we really want to commend you for doing something on the major sources, but we really want you to look at the paradigm we're in and help us shift it. We will continue to spend a great deal of our resources and our time away from our communities, but please resist the industry's pressure and implement the protected measures that we need in our communities. We need someone watching the hen house and it certainly shouldn't be the fox.

Response:

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 34

Comment: I'm here to say that we have to be thinking about the air that we breathe as a health issue for the future. We didn't think about that 30 years ago when we started pushing sugar into the diet, et cetera, in the industry that I'm in. And that's caused the -- it's 80 percent of my industry is because of obesity. And that surprises a lot of people because they think that prosthetics are something to do with accidents and war wounds, and things like that.

And I'm basically here using this -- this is what I know, and that's why I'm talking about it. I'm using this to say that we have to be incredibly mindful of what we're putting into our air because it's going to affect us in 30, 40, 50 years, which I know we all know because we've polluted far worse than we're doing now.

But when we hear -- and I represent a lot of people -- the people I talk to, the people in my community, my relationships, my girlfriend's daughter, for example, who has asthma -- people

are beside themselves when they hear that there's a potential that regulations will be cut back or that anybody would ever want to cut back regulations on what goes into our air, especially when it's the heavy metal pollutants and things like that.

And I'm here as a kind of representative. I may be unique in this room that I'm just a representative of those people that are simply saying we do not want more stuff going into our air. We don't want less regulation. We want more regulation. And we're willing to pay, also. There's a lot of -- will the taxpayer pay for that. We actually don't mind. We know -- and again, this is a group of maybe 40 people that I converse with on a daily basis over a month's time.

But we know that in countries where their taxes are through the roof that they have clean air, that they have better services, and we're fine with that.

So, that's why I'm here. I'm here to say that I and everybody I talk to -- I don't meet many people that would ever say that we want to cut back -- pull back any kind of regulation.

So I can't speak -- I don't know the industry; I can't speak to specifics about what's in all the paperwork that's on the table out there. I understand the industry has a bottom line that they're worried about; but in my opinion and all these people's opinions the bottom line is the health in the future. It isn't the finances of a corporation. The corporations, if they provide jobs, if they're progressive, they move forward.

They do what Denmark has done, for example. I know that Denmark has trash-burning plants, for example, that are putting nearly zero emissions into the air of any heavy metals. And they're all over the country, and they provide power and heat for that country. And that's astounding that we don't have a huge system doing that ourselves.

And we don't know why. They people I'm talking for don't know why that is. We are the United States of America; we're supposed to be innovators. We're supposed to have all the scientists at all the universities that have done all these wonderful things over the past century to develop technologies; and yet other countries are doing these kinds of highly, highly progressive technologies and solving their problems -- solving our problems, but we're not getting on board.

Response:

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 1

Comment: I'm here on behalf of our 200,000 supporters who want clean air and strong protections, but were not able to attend today's public hearing. We sent an e-mail to our supporters asking them to comment on the U.S. Environmental Protection Agency's Emissions Standards for Boilers and Process Heaters and Commercial Industrial Solid Waste Incinerators.

We have received thousands of responses, and continue to hear from our supporters who want the strongest regulations possible to guaranty clear air in Houston and surrounding areas. I'd like to take a few comments our supporters sent to us to deliver to you. A.J. Franklin, Houston, Texas: "As a long-time Houston, Texas resident, I am concerned about effects of our polluted air. It is hard enough to work and earn a living without having to worry that your family will have their health damaged by loopholes in the law. As a senior citizen, I would like to live my retirement years here in Houston without respiratory problems." Rodney Derbigny, Sugar Land, Texas: "Clean air is critical to health of all beings. Without clear air, not only do people suffer from debilitating ailments such as asthma, bronchitis, allergic reactions, et cetera, but poor air quality affects the environment in an multitude of ways. As a resident of the greater Houston area, the air pollution has been a long-time problem and menace to the residents and the environment. Please do everything in your power to establish and enforce regulations to clear the air in Houston and the surrounding areas. The regulations and changes need to be implemented immediately, not gradually enforced over years to come. Thank you in -- in advance for your efforts to bring cleaner air to Houston and this country as a whole." K. Craig Iles, Port Arthur, Texas: "As a lifelong asthmatic, caused by the oil refineries, chemical plants, and incinerators in Port Arthur where I grew up, I can personally speak to the horrible suffering the little children are condemned to with dirty polluted air. Grandmothers, aunts, uncles all died of cancer as did my father, who had colon cancer. Please make us proud of the EPA and our current administration by doing the right thing for the benefit of the citizens." Karon Allen, Cypress, Texas: "As someone who lives in Harris County, Texas, I fully understand the need for cleaner air. It does no good to produce an economy that destroys our environment." Carina Lobel-West, Houston, Texas: "For our childrens' childrens' future lives, and all that lives and breathes this air, please reduce emissions of toxic air pollutants from industrial boilers!" Anne Utech, Houston, Texas: "I can always tell when I return to Houston from a long trip -- the acrid smell of Houston is distinct and depressing. When I am gone more than a couple weeks, returning to Houston can give me flu-like or allergy-type symptoms, neither of which I routinely suffer from. The best thing about leaving Houston for a weekend or other trip is being able to breathe deeply without -- without that very distinct smell or feeling that you're breathing bad air. Please don't let it get any worse." Lisha Doucet, Houston, Texas: "Thank you for your recent plans to reduce emissions of toxic air pollutants like mercury, lead, and dioxins from industrial boilers, process heaters, and incinerators, but I think you could have gone much further. Please consider strengthening your standards to protect health." Dianne Travis, Richmond, Texas: "Houston has a disproportionate share of people with breathing difficulties. Children with asthma are commonplace now. Some parts of Houston simply stink from the fumes of incinerators." Karen White, Houston, Texas: "Dear EPA, Houston has become a cesspool in terms of air quality and unhealthy water. This can be changed but not without you taking your job seriously and working for the highest good." Maria Gelat, Kingwood, Texas: "Dear EPA, It is unbelievable to me that in this day in age, people have to fight corporations to have their right to breathe unpolluted air. Do these corporate CEO's have children, grandchildren? Do they ever listen to scientists, or do they like to stay ignorant?" Finally, I'm wearing a T-shirt that read, "Don't Trash Our Lungs." It's as simple as that. Thank you.

Response:

Commenter Name: Houston Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0985
Comment Excerpt Number: 14

Comment: Trees are the most powerful contractors of carbon on earth. The paper industry does more to store carbon than any other industry. Forests and forest products absorb and store enough carbon dioxide to equal 10 percent of annual carbon emissions in the United States. This is who we are. We are American workers trying to survive.

Response:

Commenter Name: Houston Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0985
Comment Excerpt Number: 26

Comment: Trees are the most powerful concentrators of carbon on earth. The paper industry does more to store carbon than any other industry. Carbon is stored within the product; paper, boards, wood and furniture.

More trees are planted to help manage the forest, and these new trees help absorb carbon. Forests and forest products absorb and store enough carbon dioxide to equal 10 percent of the annual carbon emissions in the U.S. On average, paper and wood product mills generate 65 percent of their own energy needs from renewable biomass. Our increasing use of renewable energy has allowed the industry to reduce its use of carbon-intensive fossil fuels and purchased energy per ton of product 19 percent since 2000. This industry has continually increased efforts to recover recycled paper which saves space in landfills, reduces methane emissions and minimizes waste. The forest products industry is the leading producer of carbon neutral renewable biomass energy and produces more energy from biomass than all the energy produced from solar, wind, and geothermal sources combined. This is who we are, but most importantly, we are American workers trying to survive. We hunt, fish, and love the environment. We all want clean air,

we also believe in the balance between protecting the environment and preserving American jobs. We believe this balance can be reached.

Response:

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 48

Comment: I don't know if anybody noticed today, but we actually have an ozone warning today. It's something that happens a lot in the city. It's something that will decrease with these new standards for local area plants. Also, by allowing for these standards, benzene, a known carcinogen, will increase in our air pollution. Cancer rates have been on the rise for the past couple of decades. This will not help to alleviate the situation.

Response:

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 50

Comment: Although it is not known exactly what caused the asthma that I had as a kid, I was hooked up -- or I had to use an oxygen breathing machine for several years when it was the worst. I -- I had to go through, you know, two or three inhalers at a time. And I eventually did grow out of it and now only have cold or exercise-induced asthma. And it is proven that ozone and other particulates and -- or particulates in other airborne pollutants and chemicals have a strong connection to asthma, I don't have any particular documents to cite for that, but I believe it is readily available to the public. And, you know, having grown up as one of the -- that was affected by asthma, I can say that it is not pleasant and definitely hinders your ability to develop, when you lose hours and days of school and

these types of things.

Response:

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 55

Comment: I'm alarmed and concerned by the proposed deregulation of emission controls and redefinition of solid waste. We've already experienced the negative. Results are attributed to deregulation in this country. Watching our banks fail and living through the recession, which I think is better described as a depression, yeah, has exemplified the great need for accountability in all American industries.

I no longer trust big business, corporations, industry. My short life experience in education has shown me that they don't always have my best interest at heart. White collar crime is so prevalent that it was offered as a course at my Alma mater, which is St. John's. We need the Environmental Protection Agency to protect us from the dangerous and harmful pollutants that industry creates. I don't think there's a price that can be put on human health. There are some things that money can't cover up and fix; a great example being the oil spill. BP can't write a check yet to fix that.

Response:

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 66

Comment: Mill employees take seriously their role as good neighbors and actively volunteer, counsel and coach in a variety of different forums. The mill's employees have made United Way contributions totaling more than \$3 million since the mid-1980s to help

strengthen our communities, improve literacy and provide for basic health and human services.

Response:

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 74

Comment: So a couple of months ago, the EPA had a similar panel meeting here to discuss raising the ozone standards for the entire region.

There were only three in the entire country and it was awesome to hold it here, because obviously Houston has some of the worst air quality in the entire country, and we have a lot of people living in this city that have asthma and upper respiratory diseases, and it's because you can't breathe the air.

And I think everybody in this room can acknowledge that, and so when we came here, we went out into the neighborhoods around the Hobby Airport, which is where there's a ton of pollution. I mean, if you take 45 southbound, you're gonna hit about -- I mean, there are oil refineries, there are petrochemical plants, and these places are already pretty unregulated, as far as what they're allowed to pump into the atmosphere that we're expected to be able to breathe. And so we went out into neighborhoods trying to get people to come to the meeting and write letters discussing the ozone standards, and we generated hundreds of letter from even like small children who said, you know, "I have asthma," or, "I have lung cancer."

And so the ozone standards were raised for Houston, so thanks for doing that. So what I find ironic is that we're now discussing, you know, letting industries that make billions of dollars that could easily just fix their machinery or do -- you know, they don't need -- they could easily be spending money on improving the way that they do their business, the way that they pump toxic crap into our air, but they don't want to spend that money.

They want to make more money by, you know, just saying, oh, well, never mind. We'll just

deregulate it so these people won't know what we're dumping into their air whether or not it's mercury, lead, arsenic, dioxins, stuff that we all know causes birth defects and cancer.

I mean, I don't -- I don't understand how that is an acceptable compromise at all. We've already raised the ozone standards. Why would we let these companies put more junk into our air and not have it be regulated at all. People living near those places where they're going to be doing this aren't the rich people that live in Houston and River Oaks; they're people that live in small houses and pay rent and, you know, can't -- can't always afford buy their kids -- like, do we have to start buying our kids gas masks pretty soon? I mean, these people can't afford to do that.

So they're the ones that are really at risk here, and I think their public health and safety is worth a hell of a lot more than a couple of million dollars for a refinery we or petrochemical company that makes more profit in one year than anybody in any of those neighborhoods combined. So yes, that's pretty much all I have, and I think also we need to start talking about corporate responsibility in a way that makes sense.

You know, these are industries that -- they -- they're accountable to their shareholders before the public. And I mean, obviously, we can look at BP and the Chevron spill, and all these events that are happening. And it's because, for years, we've said, "Oh, well. Don't worry. Just take care it yourself. We trust you." So I don't understand why we would be doing more of that. We need to be -- have more regulations, not less. We need to make sure that they're held accountable, and so doing this -- saying, hey, burn whatever you want, just call it fuel so that nobody will know what it is, I understand how that makes no sense and I think it's a ridiculous idea, so don't do it.

Response:

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 76

Comment: When people have cancer because they live next to a refinery, or when kids grow up with asthma, or sometimes they don't grow up because some kids die from asthma, the industry has a name for these costs to our families and our communities. They cause these externalities. That means that they don't factor these into the budget, into the business model. Instead, they just pass these costs onto everyone else and we have to bear these costs, our communities, our children, our grandparents. This is where the EPA comes in.

It's because of this economic model that you need someone to protect public health. That's why you guys are here, because it's your job to protect public health and to defend the public against the industry who may not care about their health. And it's your job to put these health costs back into the equation to make them answer to public health. The industry -- the industry doesn't need protection; they have -- they have all the power -- almost all of it. You know, they have an awful lot of money and they can spend it on lawyers.

But we do still have government regulatory agencies that still hold the power, but it's not -- you know, it's not easy and you -- you know, you guys will need to hang onto this. But you know, the -- the kids, the elderly, the folks who are just surviving who can't afford lawyers, they might not even be afford doctor visits, they might not be able to afford treatment for their illnesses. It's -- it's you guys' job to protect these people. That's why there is an Environmental Protection Agency, you know, because the industry is absolutely not -- you know, the industry isn't going to regulate itself. The industry is only going to be regulated by profit. That's what they're for, and I mean that's -- that's fine; that's how they work, you know, it's their job to make money, but someone else needs to oversee these industries and someone needs to make sure they follow the law.

And so it -- I mean, basically, we're -- we're just asking you to do your job and make sure that the industry is not allowed to burn toxic waste, that they're, you know, not allowed to negligent public health, because these -- you know, the community needs you right now. They need you to look out for them,

because really no one else will if you don't. So yeah, that's keeping it a bit short. I'm sure you guys have heard it all by now. I just wanted to drill that home.

Response:

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 96

Comment: We have an incinerator facility called Veolia, and for the last three or four years, Veolia has been petitioning our federal government very hard, our military, Office of Defense, to bring in mustard gas contaminated waste to burn in the City of Port Arthur. Port Arthur is home to at least 20 refineries, small and large, and we are being disproportionately impacted at this particular time and have been for over 50 years. Veolia is an incinerator facility and they propose to burn mustard gas in our community once again.

Two years ago, they brought in VX nerve gas from back east to burn in the City of Port Arthur; we protested that, but still, it was -- it fell on deaf ears, and they brought it in anyway. This incinerator has no way of measuring the toxicity level of this mustard gas. They have no way of proving that all the mustard gas is 99.99 percent destroyed, other than models that they have used. Port Arthur has a disproportionate number of people in it with severe respiratory problems, and most of the time, when people die in our community, it's because of cancer. Enough is enough already. Port Arthur is disproportionately impacted, and so is the Louisiana area.

Response:

Commenter Name: Bill Wickman and Laurel Brent-Bumb

Commenter Affiliation: Sustainable Forest Action Coalition

Document Control Number: EPA-HQ-OAR-2006-0790-1487.1

Comment Excerpt Number: 1

Comment: On July 14, 2010, SFAC sent a letter outlining our concern and disappointment over the EPA's final PSD Tailoring Rule changing current proposed language in the Energy Bill to exclude biomass combustion emissions in calculating Green House Gas Emissions. In case you

did not receive our earlier letter we are enclosing another copy to assure that you have received this, as well as, our earlier concerns.

As our July 14, 2010 letter outlined, the main objective of SFAC, which is to work at the State and Federal level to bring regulatory reform to restore our watersheds through healthy forests while maintaining and expanding the existing forest products and bio-energy infrastructure. By meeting this objective, the coalition also recognizes the additional benefit that thinning to improve forest health provides to their watersheds and furthering their efforts in protecting their natural resources from catastrophic wildfires.

Currently there are 18 biomass power plants within the SFAC area of influence with a net production capacity of 342.4 megawatts. The supply consumption is approximately 2,739,200 bone dry tons of fuel. In addition, there are two additional existing biomass power plants that could easily be restarted given the right economic indicators which have a net production of 18.5 megawatts of power capacity.

We strongly encourage you to consider the overall benefits that the forest products industry in general and the specific benefits that the biomass energy infrastructure related to this industry offers. As our July 14, 2010 letter outlined for you, data from the National Forests within the geographic region represented by SFAC, and it shows that less than 10 percent of annual net growth of forest on these National Forest land is actually treated and removed. If these lands were properly managed, a large percentage of the 18.9 percent of annual net growth that is lost to mortality each year could be available for biomass energy and still have over 70 percent of the annual growth available for carbon sequestration.

In that same July 14th letter, SFAC outlined the critical issue related to catastrophic wildfires. Again, those specifics include:.

Since the start of the 2001 National Fire Plan, Californian's have suffered through three new state records with 1.0 million acres burned in 2003, 1.5 million acres burned in 2007 and our latest state record of 1.6 million acres burned in 2008. Furthermore, a new 75-year national record was set by the 2006 fire season. During the summer of 2008, while most of Northern California was enveloped in a smoke cloud from mid-June to the beginning of August, the Northern Sierras were experiencing the largest fires in their history. Furthermore, in 2009, Northern California lost approximately 500,000 acres to wildfire. In addition to the direct threat to public health and safety; these large catastrophic fires are also destroying the forests that are needed for carbon sequestration. Often the Forest Service, for a variety of reasons, is not able to reforest these lands and they type convert to brushfields, which sequester far less carbon dioxide than a healthy forest. These fires are also degrading the watersheds that are the prime source of California's domestic and agricultural water supply.

SFAC offers the following information from the report found at www.cbmjournal.com. This report discusses just one fire that burned in Southern California in 2007. According to the report, this single fire spewed the same amount of greenhouse gases as what is produced in about one week from the state's burning of fossil fuels, according to scientists at the National Center for Atmospheric Research.

The preliminary data by the center and the University of Colorado at Boulder show that the fires emitted 7.9 million metric tons of carbon dioxide between Oct. 19 and 26. That's equivalent to 25 percent of the monthly emissions from all fossil fuel burning throughout California.

The study used satellite observations and a computer model to determine emissions based on amount of vegetation that burned. Large fires in western and southeastern states can pump as much carbon dioxide into the atmosphere in a few weeks as a state's entire motor vehicle traffic in a year, according to the paper, which will be published online Thursday in the journal Carbon Balance and Management.

The study estimates that fires in the contiguous United States and Alaska release about 290 million metric tons of carbon dioxide a year - 4 to 6 percent of the nation's total carbon dioxide emissions from fossil-fuel burning.

Coupled with this information is the following;

5,921,786 The number of acres that burned in wildfires in 2009, and represents 115% of the 20-year average for acres burned. There were 78,792 reported wildfires across the country in 2009. In the past 20 years, the number of wildfires has not increased dramatically, but the size of the fires has. A report from the Pew Center For Global Climate Change says since snow melts earlier resulting in a longer fire season, and warmer summer creates dryer soil, climate change has been a contributing factor to higher fire activity.

Given the above mentioned facts, it seems overwhelming that any new regulations that EPA is proposing should surely take into account the overall benefit that the woods products infrastructure offers in this continuing and ever increasing catastrophic wildfire issue.

Response:

Commenter Name: David P. Tenny

Commenter Affiliation: National Alliance of Forest Owners

Document Control Number: EPA-HQ-OAR-2006-0790-1884.1

Comment Excerpt Number: 1

Comment: Forest biomass is an important renewable fuel source leading to lower GHG lifecycle emissions than conventional fuels.

Wood from sustainably managed forests provides a renewable, low-carbon energy source as an alternative to fossil fuels. According to U.S. Energy Information Administration ("EIA") data, biomass already supplies over 50% of the nation's renewable energy.[See EIA, U. S. Energy Consumption by Energy Source (July 2009), available at http://www.eia.doe.gov/cneaf/alternate/page/renew_energy_consump/table1.html.] Forests can provide ample, sustainable, domestic supplies of biomass to produce liquid transportation fuels,

electricity, thermal energy (heat and power for manufacturing and other industrial uses), and synthetic natural gas. See NAFO, Carbon Neutrality of Energy from Forest Biomass, available at <http://nafoalliance.org/carbon-neutrality-of-energy-from-forest-biomass/>.

In evaluating the GHG emissions associated with fuels, a lifecycle analysis incorporates all steps in a “product system” to evaluate broader environmental impacts of products and processes. Using forest biomass as a renewable fuel source has significant carbon benefits because it has a more favorable lifecycle analysis than petroleum and other fuels. The Department of Energy (“DOE”) has estimated that “[c]ellulosic ethanol use could reduce GHGs by as much as 86%.” See U.S. Department of Energy, Ethanol Benefits, available at <http://www.afdc.energy.gov/afdc/ethanol/benefits.html> (last visited on May 4, 2010). EPA, in its final rulemaking adopting changes to the Renewable Fuel Standard Program, also recognized the GHG emissions reductions of greater than 60% that would result from the use of cellulosic biofuels compared to petroleum. Using the “displacement index” approach, EPA determined that every BTU of gasoline replaced by cellulosic ethanol will produce lifecycle GHG emission reductions of 92.7 percent.[See EPA, EPA420-D-06-008, Renewable Fuel Standard Program: Draft Regulatory Impact Analysis at 191 (September 2006).] Recent studies have also documented the GHG benefits of electricity produced from forest biomass. One study released by the Green Power Institute, which is the renewable energy program of the Pacific Institute, has found that biomass energy production in California over the last 30 years has provided two kinds of greenhouse gas benefits. See Gregory Morris, Ph.D., Bioenergy and Greenhouse Gasses (2008). First, it has avoided the GHG emissions associated with the production of fossil fuels. Second, biomass energy production has avoided the biogenic greenhouse gas emissions (mainly methane) of the various alternative disposal fates of biomass residues, replacing them with the lower potency greenhouse gas emissions of energy production. Id. at 4. The prevailing science thus acknowledges the significant carbon benefits of energy produced using renewable biomass from managed forests.

The combustion of forest biomass is part of the ongoing carbon cycle.

The prevailing view in the science community is that carbon emissions from forest biomass are offset by the prior absorption of carbon through photosynthesis that created the biomass. In other words, the carbon that enters the atmosphere when forest biomass is combusted was previously absorbed from the atmosphere by the forest biomass and will be reabsorbed when new biomass is grown.

As the EPA has concluded, there is “[s]cientific consensus . . . that the CO₂ emitted from burning biomass will not increase total atmospheric CO₂ if this consumption is done on a sustainable basis.” [Footnote: Environmental Protection Agency Combined Heat and Power Partnership, Biomass Combined Heat and Power Catalog of Technologies, 96 (Sept. 2007), available at www.epa.gov/chp/documents/biomass_chp_catalog.pdf.] Consistent with this conclusion, in its most recent Inventory, EPA did not include emissions from the combustion of wood biomass in its national emissions totals because it “assumed that the carbon . . . released during the consumption of biomass is recycled as U.S. forests and crops regenerate, causing no net addition of CO₂ to the atmosphere.” EPA 2010 Inventory at 3-10. In addition, EPA’s Mandatory Greenhouse Gas Reporting Rule does not include biogenic CO₂, such as the carbon contained in

wood and wood residues, in its reporting threshold. See generally 74 Fed. Reg. 56260 (Oct. 30, 2009). DOE's Voluntary Reporting of Greenhouse Gases Program, authorized by Section 1605(b) of the Energy Policy Act of 1992, also provides for exclusion of combustion of biomass fuels.[See DOE, Technical Guidelines: Voluntary Reporting of Greenhouse Gases (1605(b)) Program (January 2007) at 77 ("Reporters that operate vehicles using pure biofuels within their entity should not add the carbon dioxide emissions from those fuels to their inventory of mobile source emissions because such emissions are considered biogenic and the recycling of the carbon is not credited elsewhere.")]. The international GHG accounting methods developed by the IPCC also recognize that biogenic carbon is part of the natural carbon balance and will not add to atmospheric concentrations of carbon dioxide. Thus, a strong consensus exists that treating combustion of biomass as "carbon neutral" is scientifically sound.

Response:

Commenter Name: Michael A. Livermore

Commenter Affiliation: Institute for Policy Integrity New York University School of Law

Document Control Number: EPA-HQ-OAR-2006-0790-1899.1

Comment Excerpt Number: 2

Comment: The current statutory structure forces EPA to undertake a complex series of determinations and, almost inevitably, to favor command-and-control regulations. The result is a protracted regulatory process, which often produces policies that fail to maximize net social benefits. Instead, it would be more efficient and rational to impose taxes on emissions of hazardous air pollutants or to design a set of local, marketable pollution permit programs. Under these market-based regulatory programs, sources that could reduce their pollution most cheaply would do so, while the others would pay taxes or buy permits, thus achieving emissions reductions at the lowest marginal cost. While the standard marketable pollution regime (such as the Title IV Acid Rain program) may not translate seamlessly to the control of local pollutants (like HAP), it is possible to design modified programs that reap the economic and environmental benefits of a flexible system while minimizing potential problems, such as "hot spots." [Footnote: See, e.g., Jonathan Remy Nash & Richard L. Revesz, Markets and Geography: Designing Marketable Permit Schemes to Control Local and Regional Pollutants, 28 *ECOLOGICAL L.Q.* 569 (2001).]

Though some have argued that market-based mechanisms are already allowed or even envisioned by many provisions of the Clean Air Act, [Footnote: See Inimai M. Chettiar & Jason A Schwartz, The Road Ahead: EPA's Options and Obligations for Regulating Greenhouse Gases at 65-67 (Policy Integrity Report No. 3, 2009) (interpreting CAA terms like "emission standard" and "emission control" to allow market-based mechanisms); see CAA § 112(d)(3) (using terms like "emission standards" and "emission control").] EPA has struggled in the past to read permission for a cap and-trade program into Section 112(d). [Footnote: See Proposed National Emission Standards for Hazardous Air Pollutants; and, in the Alternative, Proposed Performance Standards for New and Existing Stationary Sources: Electric Utility Steam Generating Units, 69 Fed. Reg. 4652, 4661-62 (proposed Jan. 30, 2004) (proposing—as alternatives to command-and-

control regulation under § 112(d)—to develop a cap-and-trade program for utilities under either § 112(n) or § 111, presumably because a cap-and-trade would not work under § 112(d)). Note that in striking down the final version of that rule, the D.C. Circuit Court of Appeals did not rule on the validity of a cap-and-trade program under either § 111 or § 112, see *New Jersey v. EPA*, 517 F.3d 574 (D.C. Cir. 2008).] Therefore, the most straightforward solution would be for Congress to pass a new law explicitly granting such authority. Congress has considered similar changes to increase the statutory flexibility of other sections of the Clean Air Act, [Footnote: For example, Senator Voinovich has proposed giving EPA authority under § 111 to enact a “multistate emissions trading program” for sulfur dioxide and nitrogen oxides. See Draft Voinovich Legislation at http://www.eenews.net/features/documents/2009/07/31/document_daily_01.pdf.] and Congress has specifically asked for EPA to report to it on the status of standard-setting under Section 112(d). [Footnote: CAA 112(s).] EPA should advise Congress of the need and potential for such legislative fixes, to give the agency the flexible authority under Section 112 to tackle the environmental problems of the twenty-first century with twenty-first century solutions.

Response:

Commenter Name: Kevin P. Bundy

Commenter Affiliation: Center for Biological Diversity

Document Control Number: EPA-HQ-OAR-2006-0790-2009.1

Comment Excerpt Number: 1

Comment: Of special concern to the Center is the growing prevalence of biomass combustion, primarily for energy generation, throughout the United States. Proponents of biomass energy often claim that combustion of trees, agricultural waste, wood waste, and urban woody debris is “carbon neutral,” and that greenhouse gas emissions associated with this combustion have no effect on global warming. As the Center and other organizations have pointed out in detailed comments on EPA’s Inventory of U.S. Greenhouse Gas Emissions and Sinks (1990-2008), these blanket assertions regarding the “carbon neutrality” and purported climate benefits of biomass energy generation are scientifically baseless. Those comments, and the exhibits submitted therewith, are incorporated herein by reference. Since those comments were filed, additional studies and reports questioning broad assertions of carbon neutrality have been published. In addition to greenhouse gases, biomass-burning facilities also emit other pollutants, including hazardous air pollutants like mercury. [See submittal EPA-HQ-OAR-2006-0790-2010.1 - Thomas Walker, et al., Manomet Center for Conservation Sciences, Biomass Sustainability and Carbon Policy Study (June 2010), Mary S. Booth and Richard Wiles, Environmental Working Group, Clearcut Disaster: Carbon Loophole Threatens U.S. Forests (June 2010), Giuliana Zanchi, Joanneum Research, The Upfront Carbon Debt of Bioenergy (May 2010) Daniel Obrist, Atmospheric Mercury Pollution Due to Losses of Terrestrial Carbon Pools? 85 BIOGEOCHEMISTRY 119 (2007), Hans R. Friedli et al., Mercury in Smoke from Biomass Fires (2001)].

Response:

Commenter Name: Kevin P. Bundy

Commenter Affiliation: Center for Biological Diversity

Document Control Number: EPA-HQ-OAR-2006-0790-2010.1

Comment Excerpt Number: 1

Comment: The undersigned organizations respectfully submit the following comments on the United States Environmental Protection Agency's ("EPA") Inventory of U.S. Greenhouse Gas Emissions and Sinks (the "Inventory").

EPA's inventory document repeats a pernicious assumption that has profound consequences for both the climate and the nation's forests: the assumption that biomass combustion is "carbon neutral." EPA recognizes, as it must, that the combustion of biomass and biofuels produces CO₂ and other greenhouse gases. Yet EPA declines to include these emissions in national totals "because biomass fuels are of biogenic origin." [Footnote: U.S. EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2008; Public Review Draft (March 9, 2010), Ch. 3 (Energy) at 1] According to EPA, "[i]t is assumed that the carbon (C) released during the consumption of biomass is recycled as U.S. forests and crops regenerate, causing no net addition of CO₂ to the atmosphere." [Footnote: Id. (emphasis added).]

As described in detail below, scientists have concluded that this assumption represents a critical error in EPA's climate accounting methodology. This error pervades all of EPA's biomass calculations, but it is especially glaring as applied to facilities that burn woody biomass from tree plantations, forest thinning projects, or fire salvage projects. Promotion of new and expanded biomass energy facilities predicated on this assumption is beginning to threaten both the ecology of the nation's forests and the stability of the world's climate. EPA thus should revise the Inventory to eliminate reliance on the "carbon neutrality" assumption and should adopt accounting methods that accurately measure emissions from both biomass combustion and associated land use change on time scales relevant to climate protection efforts.

I. Scientists Have Identified Critical Errors in EPA's Carbon Accounting Methods.

Recent scientific work has identified a "critical climate accounting error" in the EPA's inventory method: namely, its failure to account accurately for carbon emissions associated with biomass and biofuels in the land use sector. [Footnote: Timothy Searchinger, et al., Fixing a Critical Climate Accounting Error, 326 SCIENCE 527 (2009).] Specifically, EPA's accounting "erroneously treats all bioenergy as carbon neutral regardless of the source of the biomass, which may cause large differences in net emissions. For example, the clearing of long-established forests to burn wood or grow energy crops is counted as a 100% reduction in energy emissions despite causing large releases of carbon." [Footnote: Id. at 527. As described in more detail below, this error is not limited to situations where forests are cleared entirely or converted to energy crops; rather, this error also infects analysis of the carbon impacts of thinning existing forests for biomass fuels.]

Energy generated from biomass reduces greenhouse gas emissions "only if the growth and harvesting of the biomass for energy captures carbon above and beyond what would be

sequestered anyway.” [Footnote: Timothy Searchinger, et al., Fixing a Critical Climate Accounting Error, 326 SCIENCE 528 (2009).]

Scientists thus believe that the better solution is to focus first on carbon emissions from the smokestack, and then to factor in emissions and reductions associated with land use change. According to Searchinger, et al. (2009):

The straightforward solution is to fix the accounting of bioenergy. That means tracing the actual flows of carbon and counting emissions from tailpipes and smokestacks whether from fossil energy or bioenergy. Instead of an assumption that all biomass offsets energy emissions, biomass should receive credit to the extent that its use results in additional carbon from enhanced plant growth or from the use of residues or

biowastes. Under any crediting system, credits must reflect net changes in carbon stocks, emissions of non-CO₂ greenhouse gases, and leakage emissions resulting from changes in land-use activities to replace crops or timber diverted to bioenergy. [Footnote: [Footnote: Timothy Searchinger, et al., Fixing a Critical Climate Accounting Error, 326 SCIENCE 528 (2009).]

Such accounting also must include site-specific and regional analysis of energy generation, distribution, consumption, and demand trends sufficient to support any conclusion that biomass generation will actually offset fossil-fired generation. As discussed below, moreover, proper accounting also demands that the short-term impacts of biomass combustion be considered especially significant in light of the long time period required for resequestration of released carbon. Accurate accounting is absolutely critical to determining whether smokestack emissions from biomass combustion can be treated as “carbon neutral” in the manner proposed by EPA.

II. The Carbon Neutrality Assumption Ignores the Critical Time Lapse Between Present Carbon Dioxide Emissions and Future Carbon Sequestration.

The claim that biomass combustion is “carbon neutral” because biomass is “biogenic” is both false and dangerous, primarily because it ignores the fact that carbon emitted during biomass combustion may remain in the atmosphere for decades or centuries before being resequestered. The claim thus ignores the critical temporal relationships between present carbon emissions and the future effects of global warming and climate change. In other words, because meeting (or exceeding) atmospheric CO₂ targets has a strong temporal element, the time that it takes for CO₂ released into the atmosphere today to be reabsorbed is of critical importance in assessing the climate impacts of carbon emissions, regardless of their “biogenic” origin.

Scientists agree that “[t]he amount of carbon sequestered by forest ecosystems plays an important role in regulating atmospheric levels of carbon dioxide.” [Footnote: Tara Hudiburg, et al., Carbon Dynamics of Oregon and Northern California Forests and Potential Land-Based Carbon Storage, 19 ECOLOGICAL APPLICATIONS 163, 163 (2009).] The removal and processing of forest biomass reduces storage in forest carbon pools and results in short-term emissions of greenhouse gases, even when some of that biomass remains sequestered for a period of time in commercial forest products. [Footnote: Tara Hudiburg, et al., Carbon Dynamics of Oregon and Northern California Forests and Potential Land-Based Carbon Storage, 19 ECOLOGICAL APPLICATIONS 176-177 (2009) (discussing carbon storage reductions associated with shorter rotations and emissions caused by logging); see also Mark E. Harmon, et al., Modeling Carbon Stores in Oregon and Washington Forest Products: 1900-1992, 33 CLIMATIC CHANGE 521 (1996) (concluding that harvesting for sawtimber results in sequestration of only about 60% of carbon previously stored in forest pools).] According to

recent studies, “[t]ypically 30–50% of the harvested C is lost in manufacturing and initial use, a loss that is larger than could be expected from even the most extreme forest fire.” [Footnote: Mark E. Harmon, et al., Effects of Partial Harvest on the Carbon Stores in Douglasfir/Western Hemlock Forests: A Simulation Study, 12 ECOSYSTEMS 777, 778 (2009).] Where harvested biomass is combusted for energy, rather than processed into wood products, short-term emissions are necessarily far greater, and long-term sequestration in forest products is eliminated altogether.

Thinning and post-fire salvage operations reduce the future carbon sequestration potential of a given forest stand by removing trees that otherwise would have continued to draw CO₂ from the atmosphere. [Footnote: 10 See Brooks M. Depro, et al., Public Land, Timber Harvests, and Climate Mitigation: Quantifying Carbon Sequestration Potential on U.S. Public Timberlands, 255 FOREST ECOLOGY & MGMT. 1122 (2008) (concluding that eliminating timber harvest on public lands would increase forest carbon storage capacity by roughly 40-50% over “business as usual”).] This is true even for projects that are intended to reduce fuel loads in order to lessen the potential severity of future wildfires. One recent study concluded that “fuel removal almost always reduces C storage more than the additional C that a stand is able to store when made more resistant to wildfire. . . . [I]t is inefficient to remove large amounts of biomass to reduce the fraction by which other

biomass components are consumed via combustion.” [Footnote: Stephen R. Mitchell, et al., Forest Fuel Reduction Alters Fire Severity and Long-Term Carbon Storage in Three Pacific Northwest Ecosystems, 19 ECOLOGICAL APPLICATIONS 643, 652 (2009); see also CHAD HANSON, THE MYTH OF “CATASTROPHIC” WILDFIRE: A NEW ECOLOGICAL PARADIGM OF FOREST HEALTH (2010).] Another recent study confirms that significant amounts of carbon remain sequestered in forest pools even following a high-intensity wildfire. [Footnote: Garrett W. Meigs, et al., Forest Fire Impacts on Carbon Uptake, Storage, and Emission: The Role of Burn Severity in the Eastern Cascades, Oregon, 12 ECOSYSTEMS 1246 (2009).] Surveys of the world’s most carbon-dense forests, including the moist temperate conifer forests of North America, have confirmed that the greatest accumulations of carbon biomass occur in the absence of human land-use disturbance. [Footnote: See Heather Keith, et al., Re-evaluation of Forest Biomass Carbon Stocks and Lessons from the World’s Most Carbon-Dense Forests, 106 PROC. NAT’L ACADEMY OF SCI. 11,635 (2009).]

Removal of forest biomass also affects long-term carbon storage in forest soils. Thinning and harvesting operations can reduce carbon inputs to soils and stimulate soil respiration, resulting in both reduced soil sequestration and near-term emissions. [Footnote: Robert Jandl, et al., How Strongly Can Forest Management Influence Soil Carbon Sequestration?, 137 GEODERMA 253, 257-58 (2007).] Some studies have shown that forests remain net sources of carbon emissions for more than a decade after logging operations, primarily due to increased soil respiration. [Footnote: Id. at 258.] Fuel treatments that change the amount and composition of decomposing forest biomass can influence long-term below-ground carbon storage. [Footnote: Mitchell 2009 at 652.]

The time between harvest and complete reabsorption of lost carbon by a forest stand can extend into hundreds of years. For example, one recent study concluded that even assuming perfect conversion of biomass to energy and a one-to-one displacement of fossil-fired generation, it still

took from 34 to 228 years for western forests to reach carbon neutrality for biomass used directly for energy generation, and between 201 and 459 years if the biomass was converted to biofuels (the ranges depending upon the characteristics of the trees, forests and fire return intervals). [Footnote: Mitchell 2009 at 651.] Accordingly, because forest biomass utilization is not carbon neutral in the near term, the near-term effects of carbon emissions associated with biomass combustion must be considered.

It is well established as a matter of science and policy that in order to avoid the worst impacts of global warming and climate change, global temperatures must not be allowed to exceed 2°C over pre-industrial levels. [Footnote: J. Hansen, et al., Target Atmospheric CO₂: Where Should Humanity Aim?, 2 OPEN ATMOS. SCI. J. 217 (2008).] Whether we exceed the 2°C threshold depends on the level at which atmospheric CO₂ levels are eventually stabilized. The greater the CO₂ levels, the greater the risk of exceeding this threshold and triggering likely catastrophic climate changes. The probability of overshooting 2°C is as follows according to Hare and Meinshausen (2006) [Footnote: B. Hare & M. Meinshausen, How Much Warming Are We Committed To and How Much Can Be Avoided?, 75 CLIMATIC CHANGE 111 (2006).]:

85% (68-99%) at 550 ppm CO₂ eq (= 475 ppm CO₂) 47% (26-76%) at 450 ppm CO₂ eq (=400 ppm CO₂) 27% (2-57%) at 400 ppm CO₂ eq (= 350 ppm CO₂) 8% (0-31%) at 350 ppm CO₂ eq
According to these scientists, “[o]nly scenarios that aim at stabilization levels at or below 400 ppm CO₂ equivalence (~350 ppm CO₂) can limit the probability of exceeding 2°C to reasonable levels.” [Footnote: Id. at 137.] But in order to achieve stabilization levels that avert the worst impacts of climate change, emissions must peak by about 2015, and must decline very rapidly thereafter. [Footnote: See IAN ALLISON, ET AL., THE COPENHAGEN DIAGNOSIS: UPDATING THE WORLD ON THE LATEST CLIMATE SCIENCE 9 (2009); see also M. den Elzen & N. Höhne, Reductions of greenhouse gas emissions in Annex I and non-Annex I countries for meeting concentration stabilisation targets, 91 CLIMATIC CHANGE 249 (2008).]

In short, minimizing CO₂ emissions in the next few years is critically important to meeting climate targets, even if some of all of that CO₂ might in theory be reabsorbed from the atmosphere in the decades or centuries to come. The science makes clear that the time frame for resequestration of CO₂ emitted from forest biomass combustion is on the order of decades or centuries, not years. Indeed, in evaluating carbon emissions from other biofuels, independent scientists have begun to develop strategies for evaluating the carbon impacts of biofuels in relation to the high social and environmental cost of short-term emissions. [Footnote: See M. O’Hare et al., Proper Accounting for Time Increases Crop-Based Biofuels’ Greenhouse Gas Deficit Versus Petroleum, 4 ENVTL. RESEARCH LETT. 024001 (2009) (applying discount rate to account for importance of early emissions).] Even EPA has begun to recognize the importance of this temporal analysis in other contexts. [Footnote: See U.S. EPA, EPA Lifecycle Analysis of Greenhouse Gas Emissions from Renewable Fuels (2009) (“[T]he time horizon over which emissions are analyzed and the application of a discount rate to value near-term versus longer-term emissions are critical factors”).] Short-term CO₂ emissions from woody biomass combustion are thus significant—not “neutral”—in the context of efforts to avoid the worst impacts of climate change, and should be treated as such in both environmental analysis and air permitting decisions. EPA’s failure to acknowledge this fact in the context of the annual emissions inventory is arbitrary and unsupportable.

III. Logging for Biomass Combustion Is Potentially More Harmful to the Climate and the Forest than Natural Fire.

Although EPA does not specifically mention it, another common justification for treating forest biomass as “carbon neutral” is that if not removed and burned for energy, wood is likely to burn up in forest fires, resulting in both uncontrolled carbon emissions and substantial ecological damage. Once again, recent scientific analysis has shown this premise to be false in terms of both carbon accounting and forest ecology.

Combustion of trees, brush, and litter in forest fires releases carbon emissions. Yet the emissions from fires may be far lower (and far fewer live trees may be killed) than previously believed, depending upon forest type and fire intensity. [Footnote: See, e.g., Meigs 2009.] Carbon lost in fires also may rapidly be resequenced by early successional species following disturbance. [Footnote: See *id.* at 1260-61.] Furthermore, recent scientific studies call into question the entire enterprise of removing (and burning) biomass in order to avoid carbon emissions associated with wildfire:

[F]uel removal almost always reduces C storage more than the additional C that a stand is able to store when made more resistant to wildfire. Leaves and leaf litter can and do have the majority of their biomass consumed in a high-severity wildfire, but most of the C stored in forest biomass (stem wood, branches, coarse woody debris) remains unconsumed even by high-severity wildfires. For this reason, it is inefficient to remove large amounts of biomass to reduce the fraction by which other biomass components are consumed via combustion. [Footnote: Mitchell 2009 at 652.]

Accordingly, it is not accurate to assume that carbon emissions from biomass combustion would have occurred in the forest anyway, on the same time scales and to the same degree, as a result of fire. Indeed, biomass energy generation ensures that forest biomass is converted into carbon dioxide on a very short time scale, whether or not similar emissions would have occurred as a result of fire, and regardless of whether logging is as effective as natural succession in facilitating sequestration of those emissions. Once again, these detailed questions must be answered before any particular biomass energy project can claim to be “carbon-neutral.” Current scientific work also indicates that fire, even the high-intensity variety, is a natural event that we should accept and encourage, not attempt to forestall through speculative, intensive, and destructive logging projects aimed at “forest cleaning” or “fuel reduction.” [Footnote: Mitchell 2009 at 652.] The dead trees left standing after a high-intensity fire provide critical wildlife habitat as well as soil nutrients that encourage rapid growth of early successional species. Moreover, unlike emissions produced in biomass energy facilities, carbon in standing dead trees and forest floor pools remains sequestered for a long time following even a high-intensity fire, and decays slowly into the atmosphere even as new plant growth recolonizes a burned area. The eventuality of forest fire cannot be used as an excuse for wholesale logging and burning of forests to create energy.

Finally, the demand for wood created by large-scale construction of biomass energy facilities is likely to be more than our forests can sustain, and thus may have very significant cumulative impacts on biodiversity, water quality, and forest health. [Footnote: See, e.g., V.A. Sample, Summary/synthesis: What Role Will Forests Play in America’s Long-Term Energy Future? (2009) at 16-17.] In addition, if each of these facilities were to claim “carbon neutrality,” in the absence of any evidence or analysis, the result could be a dramatic and uncontrolled overall

increase in near-term CO₂ emissions during precisely the time period when emissions most need to be curtailed.

IV. Conclusion

The “carbon neutrality” assumption is just that—an assumption, not a fact. “Carbon neutrality,” if it exists at all, must be demonstrated on a project-specific basis, taking into account all emissions from biomass production, transport, processing, and combustion, all emissions and lost sequestration capacity associated with forest thinning and clearing operations, and actual analysis of fossil fuel displacement. In the absence of such a demonstration, the actual emissions from biomass combustion must be counted in EPA’s annual emissions inventory. EPA must revise the Inventory to eliminate reliance on the “carbon neutrality” myth, and must replace it with an accurate and comprehensive accounting methodology for biomass emissions. [See submittal for additional material: “Biomass Sustainability and Carbon Policy Study”, “Clearcut Disaster: Carbon Loophole Threatens US Forests”, “The Upfront Carbon Debt of Bioenergy”, and “Mercury In Smoke From Biomass Fires”]

Response:

Commenter Name: Paolo Maffei

Commenter Affiliation: Tuolumne County

Document Control Number: EPA-HQ-OAR-2006-0790-2276

Comment Excerpt Number: 1

Comment: My own view is that to deny that global warming exists, despite all evidence to the contrary, is nothing short of willful ignorance. Reducing atmospheric CO₂ should be the overriding priority of governments in both industrialized and third world countries. No threat to the planet or mankind is greater.

My objection is to the counterproductive approach to the problem.

First we got the directive to scrap perfectly functioning diesel powered equipment working on public roads and industrial mines and replace them with new equipment.

Where was the cost/benefit analysis on this? Anyone familiar with Caterpillar engines knows they consume very little fuel in relation to the work they perform, especially compared to the average SUV (the most expensive and polluting of which were actually favored by tax policy.) Admittedly, particulate emissions are a significant health issue, but only in some areas, not in the country as a whole, certainly not in our county. This is forced obsolescence to benefit manufacturers, with minimal impact on global warming.

Response:

Commenter Name: Frances M. Prescott

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2282

Comment Excerpt Number: 2

Comment: As you know, a recent six-month study commissioned by Massachusetts state environmental officials found that wood-burning power plants release more greenhouse gases into the atmosphere than coal. The study, conducted by Manomet Center for Conservation Sciences, concluded that biomass-fired electricity would result in a 3 percent increase in carbon emissions compared with coal-fired electricity by 2050.

Ian A. Bowles, the Massachusetts state energy secretary, released a statement with the report. In that statement, he concluded, “Now that we know that electricity from biomass harvested from New England forests is not ‘carbon neutral’ in a time frame that makes sense given our legal mandate to cut greenhouse gas emissions, we need to re-evaluate our incentives for biomass.”

Response:

Commenter Name: Per Carlsson

Commenter Affiliation: ABioNova

Document Control Number: EPA-HQ-OAR-2006-0790-2147.1

Comment Excerpt Number: 4

Comment: Nonetheless, ABioNova is confident that these issues can be addressed in a commonsense, data driven approach that both achieves significant improvements in biomass boiler emissions and balances the needs of communities and small businesses. If ABioNova can be of any assistance in the future work with this proposal e.g. with information about “Best performance” from small biomass boilers in Sweden we would be honoured to do so.

Response:

General Support For or Against the Rule

General Support

Commenter Name: Rebecca Goodrich

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-0068

Comment Excerpt Number: 1

Comment: I’m a concerned citizen and parent. I’ve seen too many children with neurological disorders in our schools. More are being born every day [autism, ADHD, etc.]

Our country will not endure if we poison our children. Please tighten mercury emissions rules in all cases. ABsolute zero mercury would be best.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 14

Comment: On behalf of NACAA, thank you for this opportunity to testify on four related regulations EPA has proposed under Sections 112 and 129 of the Clean Air Act. The proposed rules will substantially reduce emissions of HAPs and criteria pollutants from a broad sector of industrial, commercial, and institutional boilers and from commercial solid waste incinerators. After coal-fired power plants, these combustion units are among the largest emitters of toxic and criteria pollutants in the country. Accordingly, the benefits to public health and welfare that will result from a well-considered rule are substantial.

NACAA strongly supports adoption of timely final regulations for each of these sectors that meet both the letter and the intent of the law. If EPA fails to adopt a standard in a timely fashion or fails to adhere to the statute and the rule is overturned again, the public health benefits will be delayed. In addition, state and local agencies could be faced with the significant burden of developing MACT for several thousand permits on a case-by-case basis.

After analyzing the proposals more thoroughly, NACAA will submit detailed written comments. However, we appreciate this opportunity to provide EPA with our initial impressions. Overall, NACAA is pleased that the recent proposals are a vast improvement over earlier efforts and that EPA is generally on the right track.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 24

Comment: I am testifying today as a member of the general public to voice my strong support for the EPA's proposed regulations governing emissions from commercial, institutional boilers, and solid waste incinerators. These comments are intended to provide general support for all four of the proposed regs under discussion today rather than addressing any particular proposed rule.

I'd just like to also note for the record I noticed that my name on the speaker's list was associated with NC4. That is my employer. I am not speaking on behalf of my employer today but as a general -- as an individual.

The proposed regulations will substantially reduce emissions from industrial, commercial, and institutional boilers and solid waste incinerators. These boilers and incinerators are spread across the country, in our communities, in our big cities, in industrial parks, and are minimally regulated and historically have generated the toxic brew of particulates, carbon monoxide, heavy metals, and other materials -- again, common sense that the human lung is just not intended to ingest.

For those of us that like to exercise outside, the reduction of these pollutants is not just an academic or legalistic discussion. I bicycle to work on a daily basis, from Maryland, across the District of Columbia, and into Virginia. On one hand, that exercise is substantially improve my physical fitness; but on the other hand, lungful of lead, cadmium, dioxide, and God knows what else, certainly doesn't do much for my well being.

As I said at the outset, I'm not an expert -- medical expert, a chemical engineer, but I am an accountant by training and profession. The EPA, to their credit, has done an in-depth cost-benefit analysis of these proposed regulations. Without going into great detail, it's pretty clear that the benefits to be achieved on an overall or on a large scale -- on a macro basis far outweigh the cost of implementation.

Obviously there's going to be local dislocations as we've heard one of the previous speakers point out; but I think if we look at the large picture, this is not something that,, in fact, is a cost but a long-term benefit.

We just finished watching the political drama of enacting major health care reform legislation. If nothing else, we've come away from that conversation with a clear, clear understanding that the long-term cost of health care in this country is measured in the hundreds of billions of dollars. And anything that we can do to reduce that cost will have a resounding and positive economic impact. These rules are going to do that.

We've waited way too long for these rules to be proposed by EPA. This is not something radical. This is not dangerous. This is not economically destructive. These rules are just plain common sense. It's common sense that we don't want our kids -- my kids -- breathing mercury. It's common sense that formaldehyde is not good for anyone's lungs, and it's just common sense that the economic cost of an asthma attack triggered by minimally regulated particulates is simply unacceptable these days.

My mother used to say, when all else fails, apply common sense. Ladies and gentlemen, I urge you to apply that common sense. Let's move these rules from the proposed stage to the done-deal stage now.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 25

Comment: The American Lung Association saves lives through the prevention of lung disease and the promotion of lung health. We are committed to the fight for healthy air.

Key to that fight has been our work to support the cleanup of emissions from widespread pollution sources. We have long been concerned about industrial, commercial, and institutional boilers as well as solid waste incinerators. We want to thank the EPA for taking this critical step to cut down the toxic air pollution, including sulfur dioxide and particulate matter, which spew from these boilers and incinerators.

The American Lung Association strongly supports EPA requiring the cleanup of major source and area source industrial, commercial, and institutional boilers and solid waste incinerators. These steps are long overdue. These chemical plants, refineries, paper mills, and other industrial, commercial, and institutional sources have been sources of life-threatening and life-altering gases and particles in communities all across the nation. It is time they were cleaned up.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 28

Comment: We also want to thank the administration. This is a huge rulemaking. It has been over a decade in the making. I sat on the first federal advisory or the only federal advisory committee, the ICCR and worked on these rules back then. EPA's new rules will make some of the largest facilities control emissions from boilers and process heaters. It has been a long time in coming. The Clean Air Act was passed in 1990. It is now 2010, which means that most of an entire generation of children have grown up without the protections of the Act which Congress promised them.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 69

Comment: The American Lung Association saves lives through preventing lung disease and promoting lung health. We are committed to the fight for clean healthy air. Here in Los Angeles

we breathe some of the most polluted air in the country and suffer serious health consequences. The American Lung Association strongly supports the EPA requiring the clean-up of major source and area source industrial commercial and institutional boilers and solid waste incinerators.

These steps are long overdue. These chemical plants, refineries, paper mills and other industrial, commercial and institutional sources have been sources of life-threatening and life-altering gases and particles in communities all across the nation. It is time they were cleaned up.

These boilers and incinerators produce particulate matter, the most dangerous of all widespread air pollution. It triggers asthma attacks, heart attacks and stroke, among other damage, but most critically, particulate matter kills. Breathing fine particles increase the risk that children with asthma and older adults with chronic obstructive pulmonary disease or cardiovascular disease will end up in the emergency room or the hospital.

These units also spread mercury and lead, hazardous metals that can harm children's brain, hurting their IQ, limiting their memory and their ability to learn. Because these devices are so numerous and widespread, their toxic pollution infiltrates communities across the nation. They're harm settles heaviest on those who live near them, communities that are often poorer, less well-educated and minorities. Study after study finds that pollution harms these folks far more than it does others.

Cleaning up these boilers and incinerators will save lives. Having less pollution to breathe should prevent over 3,000 non-fatal heart attacks, avoid over 35,000 cases of worsened asthma, and eliminate nearly 3,500 hospital and emergency room visits each year.

The total benefits far outweigh the costs of cleaning it up. The EPA estimates that the cleaner air from cutting emissions from major and area source boilers will save nearly \$18 billion to over \$43 billion each year beginning in 2013. The capital costs for installing equipment on all the boilers are estimated to range from \$10.5 billion to \$12 billion, with total annual costs for operations, maintenance and other routine requirements of \$3.9 billion.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Harvey Reading

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-1201

Comment Excerpt Number: 1

Comment: Start representing the PUBLIC interest again instead of being corporation lackeys, even if that means firing every damned political appointee and high-level Christofascist and corporate civil servant in your ranks. EPA has become infiltrated with dangerously right-wing staff over the last 30 years, something that must be dealt with quickly.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Andrew Stevenson

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-1231

Comment Excerpt Number: 1

Comment: Do your job: Protect the environment.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 11

Comment: We applaud the EPA for pushing forward on this. We think there are some things that need to be further improved, further protected, but we support this and I think the environmental justice communities of this region will support this rule so I thank you for taking it on.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 16

Comment: We want to definitely encourage you and thank you for your proposed rules for boiler and heat processer emissions. We think this is a real positive step to limit the air pollution here in Houston and all over the country. Putting specific limits on very toxic air pollutants that put our kids in Houston in the hospital is a very, very positive step and you're to be applauded for that and encouraged to make those rules as strong as possible. We know that the industry lobbyists will -- will lobby for these before they are finally adopted, but we would encourage you to keep them strong and adopt

them as soon as possible.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 51

Comment: Thank you to the EPA for definitely doing more to protect the air and the people that breathe it in terms of fighting emissions and telling the TCEQ to the Texas Emission on Environmental Quality to strengthen their -- their actions and protections and -- and actually getting refineries and different plants to obey the Clean Air Act more -- more or less.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 68

Comment: I just want to say thank you so much for taking the steps in order to really -- to try to send regulations on these boilers. It's been ten years coming, so thank you so much. I have been living in the Houston area since '97 so I really do appreciate y'all finally taking those steps in order to really protect human health and our environment, so thank you. I appreciate it.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 70

Comment: I'd like to thank the Environmental Protection

Agency for their efforts towards reducing toxic air pollution for the entire nation and the City of Houston. Thanks a bunch.

It's been, yeah, a good ten years coming, and within the ten years, we know that our asthma rates have doubled in the past ten years. The standards for better air quality are way overdue and it's time that we move forward into the right direction, which is a clean and healthy future for ourselves and our children here in the City of Houston and the whole country, the whole world. You know, we all breathe the same air and drink the same water, right?

So -- so yeah, the EPA's decision to eliminate unreasonable exemptions from refineries and chemical plants, paper mills and other major polluters is a huge step in that direction, so again, thank you.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 77

Comment: The proposed rules will substantially reduce emissions of hazardous air pollutants (HAPs) and criteria pollutants from a broad sector of industrial commercial and institutional boilers and from commercial solid waste incinerators. After coal-fired power plants, these combustion units are among the largest emitters of toxic and criteria pollutants in the country. Accordingly, the benefits to public health and welfare that will result from a well-considered rule would be substantial across the country and here in Houston, which is the fourth largest city in the nation with a broad industrial-based economy in energy, manufacturing, transportation and others. NACAA strongly supports adoption of timely final regulations for each of these sectors that meet both the letter and the intent of the law.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Houston Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0985
Comment Excerpt Number: 81

Comment: The American Lung Association strongly supports EPA requiring cleanup of major source and areas where its industrial, commercial, and institutional boilers and solid waste incinerators. These chemical plants, refineries, paper mills and other industrial commercial and institutional sources have been sources of life-threatening and life-altering gases and particles in communities all across the nation. I personally don't want anyone in my family having to breathe the polluting air coming from these plants, especially my newborn daughter. I'm concerned that these boilers and incinerators produce particulate matter, the most dangerous of widespread air pollutants. I'm also concerned with CT and it spreading mercury and lead, hazardous metal to children -- that harms childrens' brains and limiting their ability to learn and remember what they've learned.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Houston Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0985
Comment Excerpt Number: 84

Comment: We urge the EPA to strengthen these requirements on boilers, incinerators, and solid waste.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Houston Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0985
Comment Excerpt Number: 93

Comment: We want to first thank the Environmental Protection Agency administration, Lisa Jackson, for

taking the steps to control toxic air pollution from chemical plants, refineries, paper mills, and other industrial sources that are making our air unsafe to breathe. The EPA new rules will finally make the largest of these facilities control the emissions from their boilers and process heaters. It is about time. These standards are ten years overdue and our families and communities need the protection these rules will provide.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Robert H. Colby and G. Vinson Hellwig
Commenter Affiliation: National Association of Clean Air Agencies (NACAA)
Document Control Number: EPA-HQ-OAR-2006-0790-2022.1
Comment Excerpt Number: 1

Comment: NACAA believes that the recent proposals are a vast improvement over earlier efforts and that EPA is generally on the right track. Under sections 112(d)(2) and 129(a)(2) of the CAA emission limits for existing sources must reflect the maximum degree of reduction in emissions that the Administrator determines is feasible (MACT) and shall not be less stringent than the average emission limitation achieved by the best performing 12 percent of sources (for which the Administrator has emissions information) (the “MACT floor”). NACAA agrees with EPA’s conclusion that recent court decisions require that (a) floors for existing sources must reflect the average emission limitation achieved by the best-performing 12 percent of existing sources; (b) a MACT floor cannot be “no control”; (c) EPA cannot ignore non-technology factors that reduce HAP emissions and (d) the levels of HAP in fuels consumed by sources must be reflected in the MACT floor determination. NACAA also agrees that EPA’s proposal to establish four categories based on fuel type – coal, biomass, liquid and gas – is reasonable and well documented.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Christopher Lish
Commenter Affiliation: Citizen
Document Control Number: EPA-HQ-OAR-2006-0790-1898
Comment Excerpt Number: 1

Comment: I am writing in support of the Environmental Protection Agency’s (EPA) proposed rule regulating hazardous air pollutants from industrial, commercial, and institutional boilers. "Our duty to the whole, including to the unborn generations, bids us to restrain an unprincipled present-day minority from wasting the heritage of these unborn generations. The movement for

the conservation of wildlife and the larger movement for the conservation of all our natural resources are essentially democratic in spirit, purpose and method."

-- Theodore Roosevelt

I strongly support the EPA's decision to reduce toxic pollution from such boilers, and especially applaud the EPA's proposed regulation of hydrochloric acid and other dangerous acid gases produced by commercial and industrial boilers. Such acids pose substantial risks to industrial workers, as well as surrounding communities, and must be limited by the strict conventional Maximum Achievable Control Technology standards. I oppose any effort to establish a lesser "health-based" standard for acid gases; no such health-based standard exists.

"A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."

-- Aldo Leopold

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Matthew Markee

Commenter Affiliation: IN Group Companies

Document Control Number: EPA-HQ-OAR-2006-0790-1965.1

Comment Excerpt Number: 1

Comment: Generally IN supports EPA's efforts to establish and improve regulations that protect human health and the environment from unacceptable risks, provided that such risks can be quantified through the application of objective and verifiable science.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Jim Pettiford

Commenter Affiliation: Fulton Thermal Corp

Document Control Number: EPA-HQ-OAR-2006-0790-2192.1

Comment Excerpt Number: 1

Comment: Fulton Thermal Corporation wishes to express support for USEPA efforts to achieve cleaner air through stricter combustion emission regulations. Fulton corporate values place significant emphasis on preserving our environmental quality for future generations.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Sherilyn Coldwell

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-0072

Comment Excerpt Number: 1

Comment: I am writing in support of EPA's proposed rule regulating hazardous air pollutants from industrial/commercial/institutional boilers and process heaters, and commercial and industrial solid waste incineration units.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Susan Forbes

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-1251

Comment Excerpt Number: 1

Comment: I would like to thank you for proposing long-overdue standards to cut down on toxic air emissions from industrial, commercial, and institutional boilers. Tens of thousands of these facilities at chemical plants, oil refineries, and other industrial plants are polluting the air with unsafe emissions of dioxin, lead, mercury and other hazardous pollutants.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Trent A. Dougherty

Commenter Affiliation: Ohio Environmental Council

Document Control Number: EPA-HQ-OAR-2006-0790-1922.1

Comment Excerpt Number: 1

Comment: Generally, OEC applauds the EPA for moving forward with these much needed protections for the nation's air quality. Below are specific comments and suggestions that we feel will strengthen an already strong set of rules, and we hope they will be enacted in the very near future. We cannot afford to put off for decades, and thus sacrifice human health, the strict yet protective regulations to protect from hazardous toxics from the nation's largest polluters. We urge, with a few caveats as explained below, the swift adoption of these rules.

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Kevin P. Bundy

Commenter Affiliation: Center for Biological Diversity

Document Control Number: EPA-HQ-OAR-2006-0790-2009.1

Comment Excerpt Number: 2

Comment: We appreciate EPA's efforts in the above-referenced proposed rules to comply with numerous recent court decisions governing the agency's implementation of the Clean Air Act's hazardous air pollutant programs. We urge EPA to adopt the most stringent achievable emissions standards (MACT) for all boilers and waste incinerators, in accordance with the requirements of sections 112 and 129 of the Clean Air Act (as applicable).

Response: EPA thanks the commenter for their general support of the proposal.

Commenter Name: Frances M. Prescott

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2282

Comment Excerpt Number: 3

Comment: WE URGE THE EPA TO PASS THE PROPOSED RULES

We applaud the EPA's courageous action to tighten regulations to require area sources to conform to the Clean Air Act.

We urge you to resist industry pressure to weaken the proposed rules. Please continue to protect the vulnerable children and elderly citizens who live near the rash of biomass burning power plants being planned in hundreds of communities across the country.

Response: EPA thanks the commenter for their general support of the proposal.

General Opposition

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 29

Comment: I'm very concerned about the Boiler rule. I think that it poses a tremendous danger particularly here in Southern California where we're over-burdened with an enormous amount of boilers. The chemicals and things that come from the processed boiling down these -- this waste is very dangerous to our community.

We have very little control of our communities as it stands. This is the most heavily impacted area of the United States. Our air quality is turbulent and it has the potential to become very much worse.

Response: EPA acknowledges the general concerns of the commenter.

Commenter Name: Los Angeles Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0397
Comment Excerpt Number: 44

Comment: I'm concerned that area sources aren't more strictly regulated.

Response: EPA acknowledges the general concerns of the commenter.

Commenter Name: Los Angeles Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0397
Comment Excerpt Number: 46

Comment: It is a scientific principal -- and Bill Donawick (phonetic) once said: You don't lose anything in the process, you just change its state or its form. And when you burn trash, you're exchanging a landfill for my lungs. You're moving the landfill into my lungs.

Now, I'm looking at your materials on -- your background materials on how you were making your decisions. And just this one, auto-shredder residue. And in looking it over, it's very heavily weighted from an engineering standpoint. And I have learned this, that most environmental engineers are just that -- engineers. They're not biologists, they're not health professionals, so they do what they know best. And they see a problem, a tremendous mass of shredded automobiles -- we're talking billions of pounds. And we're pouring it into landfills and we're running out of landfills and it looks like a good engineering solution to burn it. You reduce the mass, but it doesn't disappear. Humans have this real big problem. If we don't see it, it doesn't exist anymore. Well, your lungs see it. And your lungs, more so than your skin, are permeable membranes. Things go straight from your lungs into your blood stream. There's not a barrier like your skin, so we have to be more cautious about these things that we don't see than the things that we do see.

That pile in the landfill, we can do something with it or about it. You turn it into gaseous material or small particulate material, you're ingesting it, every one of you.

And just to look at some more. Your own materials from the EPA, these are the counties designated as non-attainment under the Clean Air Act's National Ambient Air Quality standards. And if you look, this area has a concentration of non-attainment counties. And you also have color-coded it as for how many pollutants. And yellow is the largest number of pollutants not being controlled and it's this area right here.

We cannot meet the air quality standards for decent health. Not even good health. We're barely on the edge of survival on some days. We need to reduce, not see how much we can get away

with polluting our air by some process that might be of economic benefit only if you look at the small picture. Once again, broaden it.

You have to look at the big picture. Health care costs are the biggest problem in this country. Industry always recovers. I've been with Action Now for years, but I was raised on an organic chicken ranch starting in the 1950's. First edition Rachel Carson in our house. And every time there's an environmental fight it's, Oh, the end of our economic world as we know it. And it never ends up that way.

Now, on the other side, our health does continue to decline. Rampant health problems and old health problems we thought we had gotten rid of. And on a personal level, I've noticed -- and you can call it anecdotal, but my husband is a registered nurse in an emergency room in a local hospital.

But approximately two weeks ago a local auto dismantler had a fire that continued for quite a long time. Within a week people started coming in with flu-like symptoms. I myself have it now myself. We've seen this every time when there's an extra burden, any extra burden on our environment, immediate health results and that's not counting the chronic and continuing health effects that we have. Now, if you're talking about burning old tires, shredded autos, and all these process heaters and boilers, which are in almost every building around -- including right across the street there's old boilers -- I don't know how you're going to control it. A lot of the larger companies have said they can't afford more controls, pollution controls. Certainly small buildings with old boilers aren't going to be able to control their pollution. And like you said, it's not what's put in, it's what comes out. And we do not have the ability to control what comes out of all these small boilers in this area.

And I just want to wrap up with what the first speaker from Earthjustice said: Our economy always recovers, but sometimes our children don't. I want to thank him for that comment and I thank you for your time.

Response: EPA acknowledges the general concerns of the commenter.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 63

Comment: But the minor boilers -- churches, schools, banks, markets, are very much a concern to me as a parent raising my family in an already impacted environmental community.

These buildings are part of our everyday life and we will be impacted by double or triple exposures to these unregulated emissions exposures that will go unchecked. Our children, mine and yours, need to be assured that our government agencies are really out to protect us. Our very lives depend on it.

Response: EPA acknowledges the general concerns of the commenter.

Commenter Name: James Happli, Jr

Commenter Affiliation: United Steel, Paper, Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union (Wausau Paper)

Document Control Number: EPA-HQ-OAR-2006-0790-1489.1

Comment Excerpt Number: 4

Comment: I do support clean air and water but the proposed Boiler MACT rule is not reasonable. My family lives near the mill and I want them safe. Over the years, I have seen the mill get better environmentally. The equipment and practices we have are helping make us a greener facility in our community. Also, I am proud to work at a mill that produces a green product that is made from renewable local forests. You go into stores these days and it is hard to find things made in America anymore. We need more America products supporting good manufacturing jobs!!

It is critical that EPA revise this rule in a common sense way. Addressing the risk to our jobs and our way of life must be part of any change. We need clean air, but we also need good paying manufacturing jobs. Bring some balance to this rule. I respectfully request that EPA review and implement the recommendations proposed by American Forest & Paper Association (AF&PA) and National Council of Air & Stream Improvement (NCASI) in their comments regarding this rule.

Response: EPA acknowledges the general concerns of the commenter.

Commenter Name: Robert L. Garfield

Commenter Affiliation: Food Industry Environmental Council

Document Control Number: EPA-HQ-OAR-2006-0790-1835.1

Comment Excerpt Number: 1

Comment: New and overly stringent standards for industrial boilers will have an immediate impact on many food producers bottom line without demonstrated environmental benefits. Compliance costs associated with these harsh and inflexible proposed rules will cost U.S. manufacturing jobs and hurt global competitiveness, just as the economic recovery attempts to gain more traction. Further, as described below, the severity of the proposed standards may lead to the revaluation of projects that otherwise would realize environmental improvements.

Response: EPA acknowledges the general concerns of the commenter.

Commenter Name: Christian Richter and Jeff Hannapel
Commenter Affiliation: American Foundry Society
Document Control Number: EPA-HQ-OAR-2006-0790-1857.2
Comment Excerpt Number: 1

Comment: The proposed Boiler GACT standard is far more stringent than necessary to protect human health and the environment from industrial, commercial and institutional boiler HAP emissions. As the U.S. metalcasting industry continues to face global economic challenges and stiff competition from overseas, mandatory environmental controls such as the Boiler GACT must promote human health and environmental protection without imposing unnecessary regulatory burdens and requiring unreasonable expenditures of time and resources, particularly on many small entities with affected boilers such as small industrial facilities, churches, schools, hospitals, and commercial buildings.

Response: EPA acknowledges the general concerns of the commenter.

Commenter Name: William C. Scott
Commenter Affiliation: Collum's Lumber Products, LLC
Document Control Number: EPA-HQ-OAR-2006-0790-1796.1
Comment Excerpt Number: 12

Comment: As you can see, the objections we have made to the proposed rules are due to fundamental flaws in the procedures that EPA used to establish them and in the apparent mind set of the EPA which appears to lack economic consideration for the results of their rule making.

Response: EPA acknowledges the general concerns of the commenter.

Commenter Name: Jeffery S. Hannapel
Commenter Affiliation: National Association for Surface Finishing
Document Control Number: EPA-HQ-OAR-2006-0790-1840.1
Comment Excerpt Number: 14

Comment: The proposed Boiler GACT standard is far more stringent than necessary to protect human health and the environment from industrial, commercial and institutional boiler HAP emissions. As the surface finishing industry continues to face global economic challenges and stiff competition from overseas, mandatory environmental controls such as the Boiler GACT must promote human health and environmental protection without imposing unnecessary regulatory burdens and requiring unreasonable expenditures of time and resources, particular for small businesses and other small entities.

Response: EPA acknowledges the general concerns of the commenter.

Commenter Name: Steven A. Brink
Commenter Affiliation: California Forestry Association
Document Control Number: EPA-HQ-OAR-2006-0790-2026.1
Comment Excerpt Number: 1

Comment: CFA does not support EPA's Maximum Achievable Control Technology (MACT) standards for biomass boilers for major and area sources as proposed.

Response: EPA acknowledges the general concerns of the commenter.

Commenter Name: Robert M. Stwalley, III
Commenter Affiliation: The Solarian Trading Company
Document Control Number: EPA-HQ-OAR-2006-0790-2279
Comment Excerpt Number: 1

Comment: I find it deeply disturbing that an organization with as rich and distinguished a history as the US EPA is currently making decisions that affect our national well-being using a self-serving political process instead of the scientific and logical manner for which it was previously famous. Not only does the current HAP rule display a thorough lack of understanding for the complexities of biomass combustion, but the extension of Title V to CO₂ seems to show a basic disregard for both elementary chemistry and congressional intent. Public comments by some EPA personnel during the Title V tailoring period would certainly back that hypothesis. One might be tempted to believe that the current administration was using the EPA to steer the US energy profile toward high cost, impractical, long-term commitments in wind and solar voltaic power systems. As both a conservationist and an engineer that spent his entire professional career working to supply our country with clean alternative energy, I can certainly state that no right thinking individual wants to send us back the days of open stacks and uncontrolled liquid outfalls into our rivers and lakes. However, we cannot be so foolish as to think that it is a wise decision to regulate a new and promising segment of our energy profile out of existence simply because the present executive might prefer something else.

Response: EPA acknowledges the general concerns of the commenter.

Legal and Applicability Issues

General Applicability Issues

Commenter Name: Arthur N. Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management, NESCAUM
Document Control Number: EPA-HQ-OAR-2006-0790-2137.1
Comment Excerpt Number: 1

Comment: NESCAUM is concerned by the widely varying emission limits proposed for similar units regulated under section 112 of the Clean Air Act (CAA). In the past, where large differences in cost and protectiveness were associated with definitions in the regulations, litigation has resulted due to uncertainty over the meaning and application of those definitions. The NESCAUM states urge that that MACT and GACT levels be harmonized across the two proposed rules, thus resulting in consistent emission limits for similar units.

Section 112 of the CAA mandates that EPA set emission limits for covered units at “the maximum degree of reduction that is achievable,” and not merely the MACT floor. Accordingly, where feasible, EPA should adopt emission limitations of similar stringency for similar units, irrespective of how the source is regulated (e.g., as an area source or major source under section 112). NESCAUM suggests that EPA revise calculations based on a single database. If the data suggest separate numbers for major and area sources within the same category, EPA should move beyond the MACT floor and use the more stringent number and apply it in both rules.

Response: EPA disagrees with comments that suggest standards for area sources should equal those set for major sources. First, all major sources must have standards based on MACT (or work practices under CAA section 112(h). Biomass-fired and liquid-fired sources under the area source rule may be regulated under CAA section 112(d)(5) – GACT – which is a more flexible standard that allows for consideration of cost and requires standards be generally available. Commenters have provided no information indicating MACT levels for major sources would be generally achievable by these types of sources. Second, for the pollutants that must be regulated under MACT (from non-biomass solid fuel-fired boilers), EPA must respect the statutory provision that requires floors be set based on data from within the category or subcategory. Major sources and area sources are separate categories. While we could go set standards above the floor, commenters have provided no data supporting that such levels are appropriate considering the statutory factors in CAA section 112(d)(2).

Pollution charges do not appear to be one of the authorized control methods under CAA section 112(d). Additionally, the commenter does not suggest a method for developing charges that reflect the social cost of pollution.

In light of the form of the final rule, requiring primarily energy conservation measures for all area sources for most sources, we do not believe the rule places an inappropriate burden on rural communities reliant on liquid-fired or biomass-fired boilers. The requirement to develop a list of pollutant that have urban impacts does not preclude the agency from regulating those pollutants not only in urban areas but also in rural areas. By its terms, CAA section 112(c)(3) says regulate these pollutants and not these pollutants solely when emitted at urban sources. Furthermore, CAA section 112(c)(6) contains no limitation to urban areas.

EPA's basis for requiring an energy assessment at larger area source boilers is explained in the preamble. Also, as indicated in the preamble, EPA's selection of control requirements for various subcategories reflect the statutory authority and basis for listing, the relevant requirements for controls under each basis for listing, and apply HAP control and emission reduction methods suitable for the emission source.

In contrast to the major source boiler rule, the area source boiler rule does not address gas emissions because they are not significant sources of HAP emissions in the 1990 emission inventory that was used as the basis for listing.

Commenter Name: N/A

Commenter Affiliation: Mercatus Center, George Mason University

Document Control Number: EPA-HQ-OAR-2006-0790-1837.1

Comment Excerpt Number: 8

Comment: Under the proposed rule EPA would require boiler tune-ups and energy reviews for existing boilers. If instead boiler operators were charged a fee based on the social cost of their pollution, then businesses and institutions would have a profit motive to reduce their pollution. Organizations would be able to consider a wider range of options than are available to regulators.

In some cases, a new boiler might bring greater benefits than a tune-up. Turning down the thermostat might be as effective. A pollution charge also avoids problems such as when a company is forced to invest in greater energy efficiency and responds to reduction in the cost of heating by using more.

Response: See response to comment EPA-HQ-OAR-2006-0790-2137.1, excerpt 1 for discussion of general applicability issues.

Commenter Name: Chris Mello

Commenter Affiliation: Alaska Energy Authority

Document Control Number: EPA-HQ-OAR-2006-0790-1653.1

Comment Excerpt Number: 9

Comment: The area source regulation of hazardous air pollutants as part of this rulemaking should not apply to rural Alaska and should remain part of an urban-only effort

Rural Alaska biomass systems are not major sources of hazardous air pollutants. The area source provisions of this NESHAP rule are derived from the Integrated Urban Strategy of the National Air Toxics program promulgated in July of 1999. The State of Alaska does not believe it is appropriate to regulate rural -area sources" under the auspices of a program designed to reduce HAP exposures to citizens residing in metropolitan areas (inventoried as greater than 250,000

people). The State of Alaska also questions whether EPA has the authority to regulate rural area sources under the Integrated Urban Strategy.

In the proposed NESHAP rule, EPA justifies regulating area sources nationwide by pointing out boilers exist nationwide. The State of Alaska agrees rural stationary boilers are a source of pollution. The State of Alaska does not agree the NESHAP derived urban air toxics rule is in a vehicle to regulate rural boilers. Rules LU A.UUIGJJ atcaN NULLIeCj urban areas were developed because EPA recognized the sources and air toxics in urban areas are more varied and of a greater amount than in rural areas.

The promulgated rules were developed to address multi-factorial urban exposures. The rural Alaska biomass boilers are not major HAP sources, nor are they part of some extensive "soup" of pollutants contributing to cancer incidence in cities. Rural areas, particularly remote areas such as rural Alaska, have a much different exposure scenario than urban areas and much different operating and compliance costs. EPA has identified up to 70 area source categories in urban areas. Alaska villages have only a handful of these sources. There is little industry in the villages, and according to Power Cost Equalization (PCE) data, rural villages use 40%-50% less energy than urban areas in Alaska.

The cost to comply with these rules is much greater than in other parts of the country. Shipping to rural Alaska is expensive. Logistics are complicated and thus costly. Construction seasons are short and qualified personnel must be flown out and housed to install emission controls or perform source tests. This would further exacerbate the already disproportionately higher cost of heat in rural Alaska.

Reduction of fine particulate is already underway as Alaska's rural villages install EPA approved boiler systems and continue to update diesel generators. Further, the state of Alaska is investing 50 million dollars a year in alternative and renewable energies. Already many rural Alaska villages are beginning to integrate wind or wind-diesel hybrids. These villages are saving money and fuel and reducing their emissions. Other projects include looking at expanding hydroelectric projects, or developing existing geothermal resources, and building interties to connect villages to larger and more efficient power sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-2137.1, excerpt 1 for discussion of general applicability issues.

Commenter Name: Gary Rubenstein

Commenter Affiliation: Kauai Island Utility Cooperative, KIUC

Document Control Number: EPA-HQ-OAR-2006-0790-2028.1

Comment Excerpt Number: 12

Comment: Area sources in rural areas do not cause elevated health risk by themselves, do not contribute to elevated health risk levels in urban areas, and therefore, should not be regulated

under EPA's Urban Air Toxics Strategy (i.e., under Section 112(c)(3) of the CAA). Commenter to the Reciprocating Internal Combustion Engine NESHAP (RICE NESHAP) suggested that EPA either restrict the area source emission limits to clearly defined urban areas, such as those defined by the U.S. Census Bureau, or areas within a certain distance of clearly defined urban areas. Other commenters to the RICE NESHAP recommended that controls for area sources only be required where excess health risk is created, or a positive cost-health benefit relationship may be demonstrated.

We agree that EPA is not prohibited by the language of the CAA to regulate all area sources; however, we question the rationale of including rural area sources on the basis that they form only a small percentage of the total inventory. We concur with the commenters who conclude that impetus behind the Urban Air Toxics Strategy is reducing urban health risk, and question why EPA would impose the cost of MACT on sources that could not possibly impact urban populations (such as a boiler located on a neighbor island in Hawaii).

Response: See response to comment EPA-HQ-OAR-2006-0790-2137.1, excerpt 1 for discussion of general applicability issues.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 64

Comment: This proposed requirement is beyond EPA's authority and should not be included in the final rule. In our separately filed comments under the major source rule we express this same opinion and we refer you to those detailed comments, which apply to both rules equally (See Section XVII, docket EPA-HQ-OAR-2002-0058; we incorporate those comments by reference).

Response: See response to comment EPA-HQ-OAR-2006-0790-2137.1, excerpt 1 for discussion of general applicability issues.

Commenter Name: Kevin P. Bundy

Commenter Affiliation: Center for Biological Diversity

Document Control Number: EPA-HQ-OAR-2006-0790-2009.1

Comment Excerpt Number: 4

Comment: EPA should reject these invitations to indulge in impermissible policy judgments that go beyond the text and purpose of the Clean Air Act. EPA has no authority under either section 112 or 129 to promote one type of combustion over another as a policy matter by imposing inequitable regulatory burdens on sources burning different fuels. Hazardous pollutants are

hazardous pollutants, and they pose a danger to human health and the environment regardless of the fuel that produces them. Nothing in sections 112 or 129 authorizes EPA to waive or otherwise weaken MACT standards because either the agency or a regulated source category believes a fuel to have other desirable characteristics.

Response: See response to comment EPA-HQ-OAR-2006-0790-2137.1, excerpt 1 for discussion of general applicability issues.

Commenter Name: Gregory A. Wilkins

Commenter Affiliation: Marathon Petroleum Company, LLC

Document Control Number: EPA-HQ-OAR-2006-0790-2165.1

Comment Excerpt Number: 4

Comment: Marathon recommends increasing flexibility in areas where minimal oil firing is needed. It is requested that the affected source be the collection of process heaters and boilers that burn at least 90% natural gas or refinery fuel gas. Changing the affected source to the collection of sources would not increase emissions. It would provide for greater flexibility to allow the affected source to be the collection of heaters and boilers at a facility that burns at least 90 percent natural gas and /or refinery gas in combination with liquid fuels on a heat input basis on an annual average.

Response: See response to comment EPA-HQ-OAR-2006-0790-2137.1, excerpt 1 for discussion of general applicability issues.

Legal/Applicability: EGU Questions

Commenter Name: Gregg Tomberlin

Commenter Affiliation: Novo Energy, LLC

Document Control Number: EPA-HQ-OAR-2006-0790-0834.1

Comment Excerpt Number: 1

Comment: The EPA is proposing onerous emissions limitations on renewable energy under the MACT program. The proposed emission standards will have a devastating impact on the renewable energy industry in several ways. The efforts to implement new clean biomass energy plants will be severely handicapped and project developers could potentially abandon this renewable space based upon these requirements.

Response: The final area source rule does not contain MACT-based limits for biomass-fired units. In particular, there is no CO numeric limit in the final rule. The tune up requirement for all existing biomass boilers and the energy assessment requirement for larger existing boilers should be generally achievable. New biomass units are subject to a GACT based PM limit. Information gathered through comments indicates that particulate controls are common among new biomass boilers. To the extent that biomass-fired EGUs are regulated under the area source rule, they will be regulated in a manner that is consistent with good combustion and minimal use of fuel inputs, thereby reducing HAP emissions. No units classified as solid waste incinerators are subject to this rule.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 19

Comment: The EPA needs to revise the rules so they do not create disincentives to greater biomass utilization. How ironic that EPA would propose rules that create serious disincentives for biomass use at a time when many states have renewable portfolio standards mandating that up to 40 percent of their energy use come from renewable sources.

While wind, solar and geothermal are important parts of that equation, biomass is a well-developed energy source that does not suffer from the inherent variability of many other sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 25

Comment: A lot of the speakers talk about biomass. We recently had a large biomass plant apply to our energy commission here in California for permits. And their estimated emissions limits were higher than if they were going to burn coal. And actually there was a major report released yesterday on biomass burning and how many of the states back east are meeting their portfolio standards by cutting down their forests and burning wood. So the whole concept of biomass burning and whether it's really a good idea or not bears some scrutiny.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Los Angeles Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0397
Comment Excerpt Number: 32

Comment: We are the trade organization of the solid fuel woodchip-fueled biomass electric power plants in California. There are 33 biomass power plants in California which together produce almost percent of California's electricity. These plants are spread across different counties, all in the rural areas.

California has a percent renewable portfolio standard that operating biomass plants today produce about and a half percent of the renewable energy in California and provide about 2,000 jobs, counting those in the fuel supply infrastructure. All are regulated by the appropriate air pollution control district under local permits and under the Federal Title permits.

There are a variety of technologies for combustion, but all are direct combustion steam-cycled plants. And because of the variety, I'm speaking to the Boiler MACT and the Area Source Rule. These are utility scaled but not utility boilers. Our group uses over million tons a year of wood residues and otherwise unmarketable wood to produce the power.

Our fuel comes from agricultural forests and mill residues. Those residues are processed, chipped, screened, metal removed and transported. It is a commodity and a fuel, not waste. Our plants provide solutions to the problems of open burning of agricultural residues and forests waste either in prescribed burns or wild fires. Our plants operate under long-term contracts to the regulated utilities selling power wholesale. Now, I understand that many commenters to these rules will complain about the costs. I shall do so also but want to point out that under the contracts we have with the utilities there is absolutely no pass through or mechanism for recovering additional costs which would be incurred by complying with the retroactive regulations.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Los Angeles Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0397
Comment Excerpt Number: 37

Comment: One, I think that we all want to promote renewable energy development in this country, and we all want to promote local and regional environmental improvement. We all want to promote healthy forests. And we all want to reduce greenhouse gas emissions. While, in fact, biomass industry production both today and in the foreseeable future promote all of these policy goals.

And if the MACT were to go into effect the way it's written right now and were to seriously shut down much or all of the biomass industry, we would lose all of those benefits that biomass is actually contributing to. What I think we have here is a very serious example of what Voltaire called the perfect being the enemy of the good.

Biomass plants in California -- and I'm going to talk specifically about California where we have more than a quarter of the U.S. biomass industry. Biomass plants in our Central Valley are key to promoting or facilitating the burn ban on open burning of ag material. In fact, just this past month the San Joaquin Valley Air Pollution Control District delayed the implementation of that burn ban because they were worried that there weren't enough outlets for that material.

The biomass industry is the logical of both for -- or the outlet for any biomass materials that can't be used for higher-valued purpose. Biomass plants around the state are keeping a significant quantity of clean wood waste out of landfills. That helps our counties comply with their AB30 -- AB939 requirements which is a diversion requirement that we have. And, of course, as you know, when you bury waste in landfills you get both greenhouse gas emissions and toxic emissions. So keeping them out avoids those things. Biomass plants eliminate pile burning of forest harvesting residues in the forest. And, in fact, when there are commercial harvests in the forests in California, the harvesters are not allowed to simply leave the residue in the fill. They can either bring them to a biomass plant or they have to pile-burn them in the field. And finally, biomass plants contribute significantly to healthier forests. And I want to say there's been a lot of misinformation recently about biomass and its effects on the forests. It's very important to understand: Energy is the lowest-valued use for biomass. Anytime that there is a higher-valued use for biomass, even the biomass power plants would rather see it go there.

Nobody cuts down a forest to power biomass plants. In fact, we have a number of examples in California where the -- and we have a lot of national forest land in California that's in rather poor condition. But around some of the biomass plants that have taken forest residues, we have some of the healthiest of the national forest lands in California.

Biomass fuel producers will never pay enough to promote actual harvesting of fuel for the purpose of fueling a biomass power plant. They will simply take the residues produced and they will also facilitate but not pay the full cost of forest treatment operations. So it's very important in my view that we do what we can to promote renewable energy; biomass being one of the key renewable energies across the country and that we keep in mind that anything we do that will actually impede them. And this is kind of a marginal, economically speaking, industry to begin with. Anything we do to increase their costs or restrict their ability to get fuel will simply shrink the industry, promote the greater use of fossil fuel and impede our ability to meet the important environmental goals.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Margaret E. Sheehan
Commenter Affiliation: Energy Justice Network
Document Control Number: EPA-HQ-OAR-2006-0790-1053.1
Comment Excerpt Number: 7

Comment: Existing small boilers should not be exempt from emissions limits if the boilers are producing commercial electricity that is being qualified as “renewable electricity” under state renewable portfolio standards.

Many “small” boilers emitting mercury will have the same public health and environmental impacts as one large boiler. There is no legal, scientific, economic, or social justification for exempting such small boilers from the mercury rule, especially if these boilers are producing commercial electricity under the guise of being “clean and green” and qualifying as “renewable energy” under state Renewable Portfolio Standards.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Houston Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0985
Comment Excerpt Number: 57

Comment: I only have a general comment as far as changes in regulation, is that in the issue of biomass and comparing it with coal-fired, biomass is one of the renewable energies that we certainly are trying to develop more. We’re trying to develop a renewable energy system to replace the current fossil fuel technologies, and there are a lot of challenges with that.

Any additional restrictions to emissions related to biomass certainly adds additional challenges to what is already existing. One of the issues with biomass is the cost. You know, we’re always trying to develop new biomass-type facilities and new plants, but we always have to compete with cost of existing fossil fuel plants, so we’re trying to always watch those costs. Any new regulation -- this is in general -- any new regulations that restrict emissions on biomass plants, while small, any small changes can add additional costs, which makes -- could make biomass plants slightly less economically feasible. So those small changes have a big impact,

and I know from overall, the -- the federal government, the state government, and local agencies have been certainly pushing for renewable energy, and where -- areas where there is an abundance of biomass, pushing for biomass. I mean, that's a good thing that helps clean our environment. So on the one hand, it helps to have biomass being pushed forward, but if on the other hand we have additional regulations, which restrict the usage of it, that creates a lot of hindrances.

So all I'm asking is that those considerations be put in place into new regulations to really free biomass to let us develop the biomass facilities and -- and receive the continual encouraging of the federal, state, and local levels. Biomass is a very challenging technology, and we certainly want to continue.

Right now in the country, only 4 percent of the power generated is from biomass where 49 percent is generated from coal-fired plants. So if -- if you want to put regulation, you know, as a comparison, it is good to put more regulation on coal-fired plants because that's where majority of the emissions are coming from, whereas biomass, it's such a flea bite right now. To put more regulations on that really doesn't have an impact on the environment, and it has a detrimental affect because you impede growth in renewable energy.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Nathan McClure

Commenter Affiliation: Georgia Forestry Commission

Document Control Number: EPA-HQ-OAR-2006-0790-1287

Comment Excerpt Number: 1

Comment: Over 70 forest product mills in Georgia combust woody biomass for energy, including sawdust, wood chips, bark, black liquor, and other forest biomass-based fuels.

[Footnote: Georgia Forestry Commission forest industry survey, 2008] This represents 35% of our primary processors in the industry. A subset of this energy production is 3.362 billion Kwh of electricity generated using wood feedstock. [Footnote: Energy Information Administration; http://www.eia.doe.gov/cneaf/solar.renewables/page/rea_data/table1_20.pdf]

The forest industry in Georgia is the second largest industry creating jobs for 128,387 persons and providing a \$28.7 billion dollar economic impact to the State. [Footnote: Riall, William;

Economic Benefits of the Forest Industry in Georgia, 2008; Enterprise Innovation Institute, Georgia Institute of Technology; 2008;
<http://gatrees.org/ForestMarketing/EconomicImpactsofForestIndustry.cfm>]

The forest industry is energy intensive, but has developed very efficient renewable systems using biomass that they purchase along with their other feedstocks for manufacturing. This adaptation has evolved to enhance these US industries ability to compete globally. The forest industry manufacturers produce a variety of products including lumber, plywood, oriented strand board, paper, pulp, posts, shavings, sawdust, bark, and others.

Shavings, sawdust, wood chips and bark are considered by-products and are not waste. US Forest Service Timber Product Output reports show that 99.9 % of these “residues” were utilized for products during the last survey period with only 10,000 tons not being utilized out of a total of 6,895,000 tons produced. [Footnote: Timber Product Output database; Southern Research Station US Forest Service , 2007; <http://fia.fs.fed.us/tools-data/other/default.asp>] In fact, there are over 8 new industries in Georgia that produce wood shavings directly from roundwood (small trees) to meet market demand. Anecdotal evidence has also shown that shavings, sawdust and bark from sawmills has been one of the few products producing profits for mills since the 2008 economic downturn.

Over 91% of Georgia’s forests are privately owned. [Footnote: Forest Inventory and Analysis database, US Forest Service; 2009; <http://fia.fs.fed.us/tools-data/other/default.asp>] These forests are purposely managed for a variety of objectives, but with the majority of these managed in ways that result in the planned harvest of timber. This is supported by the fact that Georgia produces more wood products than any other state.

Logging residues are produced at an average annual rate of 10.1 million green tons [Footnote:]. These logging residues can be used for solid fuel in renewable energy systems. The alternative is to have the residues decay on site with CO₂ and other greenhouse gases being emitted in the decay process.

The Georgia Forestry Commission has been working to encourage additional use of Georgia’s forest biomass for energy. There are 11 biomass-to-electricity plants proposed to be constructed in Georgia that represent 630 MW of renewable energy that would offset fossil fuel electricity production and their associated greenhouse gas emissions.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Joe O'Rourke

Commenter Affiliation: F.H. Stoltze Land and Lumber Company

Document Control Number: EPA-HQ-OAR-2006-0790-1467.1

Comment Excerpt Number: 1

Comment: We have a bank of four boilers that are now 100 years old. Those boilers burn woody residues that are a byproduct of sawmill lumber production. We are currently examining replacing these old boilers with a newer boiler system that would also be capable of power generation. The cogeneration boiler would produce both process heat for our lumber drying operations, as well as generating electrical power that would be sold as renewal, carbon-neutral (green) energy to the power grid.

The EPA proposed rules referenced above would not only make our goal of generating a combination of process heat and green power from a renewable resource, much more difficult, it would threaten the very existence of our business and the jobs of our employees.

Our goal of becoming a producer of clean green power would be unachievable under the CISWI rule (EPA-HQ-OAR-2003-0119). That rule, as formulated, would force us to re-classify our boilers as incinerators if we introduce woody biomass fuel from sources that are outside our internal production process. Timothy Hunt, Senior Director of American Forest and Paper Association (AF&PA), stated at an EPA hearing that was held on June 15, 2010; “The solid waste definitions EPA sets have the potential to seriously restrict which types of biomass may be burned for their carbon-neutral energy and which may be pushed into the waste stream.” Today woody material that is left in the forest after logging operations, either is consumed in planned burns, or is left in the woods to decompose. With a cogeneration system, this fuel will be brought in from the forest, processed, and burned in the boiler, to produce heat and energy. The energy that will be produced will offset energy that is now generated by burning fossil fuels. That clean, green energy would contribute to the state and national goal for a greater use of electrical power generated from renewable fuels.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Russ Mull

Commenter Affiliation: Shasta County Air Quality Management District

Document Control Number: EPA-HQ-OAR-2006-0790-1167

Comment Excerpt Number: 1

Comment: Shasta County is very concerned about the consequences of this regulation on biomass-fired power production facilities. The carbon monoxide limit for biomass facilities, both existing and new, will have a dramatic impact on biomass energy production. Standalone biomass facilities typically have a carbon monoxide concentration limit of 1,000 ppm, along with mass over time limits.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Douglas J. Fulle
Commenter Affiliation: Oglethorpe Power Corporation
Document Control Number: EPA-HQ-OAR-2006-0790-1798.1
Comment Excerpt Number: 2

Comment: OPC is in the electric power generating business. As a result, OPC owns, operates, or has an interest in several utility boilers that meet the § 112(a)(8) definition of "electric utility steam generating unit" ("EGU") -i.e., these units are fossil fuel-fired combustion units of more than 25 MW that serve a generator that produces electricity for sale. We anticipate that these units will be subject to the upcoming "Utility MACT" standard.

However, as explained above, OPC also is developing a new power plant that will be wholly fueled by biogenic materials, including biodiesel during startup and woody biomass during periods of normal operation. Because this unit will not be fossil fueled, it does not meet the definition of EGU and, thus, will not be subject to the Utility MACT. As a result, we expect that our biomass unit and others like it will be subject to the industrial boiler Area Source Rule.

The proposed Area Source Rule preamble does not provide any discussion of this issue and the proposed regulatory text does not expressly distinguish biomass-fired electric generating units from fossil-fired EGUs. To avoid any possible confusion in the future, we urge EPA to include provisions in the final Area Source Rule that expressly indicate that biomass fired area source electric generating units are covered by this rule rather than the Utility MACT. This could be accomplished by including a definition for EGO in the final rule, noting in § 63.11194 ("What is the affected source of this subpart?") that the affected source includes area source biomass fired electric generating units, and explaining in § 63.11195 ("Are any boilers not subject to this subpart?") that fossil-fuel fired EGOs are not subject to the Area Source Rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Michael Bradley
Commenter Affiliation: The Clean Energy Group
Document Control Number: EPA-HQ-OAR-2006-0790-1689.1
Comment Excerpt Number: 6

Comment: In establishing emissions standards for ICI boilers and process heater, as well as next year's expected standards for EGU boilers, EPA must consider potential impacts on renewable generation. Members of the Clean Energy Group have already raised concerns with EPA that this proposed rule does not properly identify what fuel blends are considered covered sources under this proposal and which will be covered by the anticipated EGU MACT. For example, in the case of units that blend biomass with coal to generate more than 25 MW, this rule does not clarify which MACT standard governs these units. In other words, it is not clear whether the expected EGU MACT or this ICI MACT would apply to a unit burning 50 percent coal and 50 percent biomass to generate more than 25 MW for sale.

One Clean Energy Group member recently received a New Source Review (NSR) permit for the conversion of an 82 MW EGU utilizing natural gas and No. 6 oil to utilize biomass, natural gas, and ultra low sulfur diesel. The EGU would either use biomass to generate 40 MW or fossil fuels to generate up to 82 MW. There would be no co-firing of biomass and fossil fuel except for limited periods for the transition from biomass to fossil fuel firing. It is unclear whether this unit would retain its EGU designation or be considered an ICI unit.

We have heard from EPA that the anticipated EGU MACT will clarify which MACT standard governs these examples; however, it creates substantial business uncertainty to require these units to wait until the finalization of the EGU MACT to determine which rule applies. EPA should clarify in the final ICI MACT regulations that an existing EGU retaining its ability to use any fossil fuel be considered an EGU for MACT purposes and not an ICI unit. In addition to aligning most closely with the purpose of these units, electricity generation, this option would allow operators of these units a full notice-and-comment period on the applicable MACT standard.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners, CIBO

Document Control Number: EPA-HQ-OAR-2006-0790-1783.1

Comment Excerpt Number: 45

Comment: The Proposed Rule does not provide an exemption for electric utility steam generating units. CIBO recommends that EPA include in the final rule an exemption for electric utility steam generating units similar to that provided in the Proposed Boiler MACT Rule. See 75 FR 32050.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Cheryl Johncox

Commenter Affiliation: Minneapolis Neighbors for Clean Air

Document Control Number: EPA-HQ-OAR-2006-0790-1971

Comment Excerpt Number: 1

Comment: EPA's projections of biomass buildout, as reflected in the cost estimate portion of the Major Source rule, appear to rely on an April 2010 memo from ERG where ERG actually projects a decline in biomass power generation by 2015.[Memo from Graham Gibson, ERG to Jim Eddinger, EPA. New Unit Analysis Industrial, Commercial, and Institutional Boilers and

Process Heaters National Emission Standards for Hazardous Air Pollutants – Major Source. April, 2010.] EPA seems incognizant of the actual number of biomass plants and biomass co-firing projects currently proposed and in permitting, or the amount of biomass power that the Energy Information Administration projects will come online under both business-as-usual scenarios and scenarios where renewable energy is promoted at the federal level.[Environmental Working Group, 2010. Clear Cut Disaster. Washington, DC.] According to industry data, current proposals for biomass power will virtually double the existing capacity for electric generation from biomass, adding an additional 5830 MW, which may be a conservative estimate given increased number of co-firing applications. Current estimates for pending applications in Ohio range from 1200-1600 MW, varying depending on permit amendments and new applications.[EL-REN applications approved and pending before the Public Utilities Commission of Ohio July 30,2010 <http://www.puco.ohio.gov/>.] Combined permits for Florida and Georgia are roughly an additional 1200 MW. With the amount of biomass power due to come online in the next five years, it is significant that in many respects, the MACT standards proposed for biomass boilers are not as stringent as those proposed for coal-fired boilers.

It is also troubling that a significant number of these newly proposed biomass boilers appear to be engineering air permitting so as to be regulated as “area” sources for HAPs, which appears to be possible for plants that are less than 50 MW. EPA appears to be unaware not only of the number of biomass facilities currently being planned, but also that a potentially significant proportion of these new boilers will be burning secondary materials as fuel, and as area sources will be subject to relatively little regulation. Air permitting documents from new biomass plants in development ranging from 38 to 55 MW reveal these boilers are considered “area” sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Jeff A. McNelly

Commenter Affiliation: ARIPPA

Document Control Number: EPA-HQ-OAR-2006-0790-1988.1

Comment Excerpt Number: 1

Comment: In promulgating multiple MACT source standards for similar source categories, EPA has typically clarified, through the applicability or definition sections of the relevant regulations, that a source subject to a specific MACT standard would not be subject to a related MACT standard designed to limit similar hazardous air pollutant (“HAP”) emissions from similar sources. See, e.g., 40 C.F.R. Part 63, Subparts R (Section 63.420(i)) and Subpart LLLLL (Section 63.8681(c)). Indeed, in the context of EPA’s proposed rulemaking for Industrial, Commercial and Institutional Boilers and Process Heaters located at major sources, proposed for promulgation at 40 CFR Part 63, Subpart DDDDD (the “Boiler MACT”), which EPA published for notice and comment in conjunction with the Proposed Rule, the proposed Boiler MACT would expressly state that sources subject to the MACT standard for electric generating units (“EGUs”) would not be subject to the Boiler MACT. Surprisingly, EPA has not proposed to include similar language within the Proposed Rule. Therefore, under the current terms of the

Proposed Rule, a facility can potentially be simultaneously subject to regulatory standards under the Area Source MACT and the EGU MACT. Such overlap of regulatory applicability would necessarily cause confusion and impose unnecessary regulatory burden while achieving no environmental benefit.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Jeff A. McNelly

Commenter Affiliation: ARIPPA

Document Control Number: EPA-HQ-OAR-2006-0790-1988.1

Comment Excerpt Number: 2

Comment: The ARIPPA facilities constitute electric generating units (“EGUs”) pursuant to the definitions promulgated by EPA under most major air quality regulatory standards. See, e.g., 40 C.F.R. Part 60, Subparts Da and HHHH, Part 63, Subpart DDDDD. ARIPPA fully anticipates that the final EGU MACT will be consistent, in terms of applicability, with EPA’s regulation of EGUs under other CAA regulatory standards, and therefore the final EGU MACT will apply to the ARIPPA facilities. ARIPPA anticipates that EPA fully intends that sources subject to the EGU MACT would not also be subject to the Area Source MACT. Therefore, ARIPPA specifically proposes that the Proposed Rule be modified to expressly include within the regulatory exemptions to Area Source MACT sources subject to the EGU MACT or the Boiler MACT, as follows.

Exemption(s)....

§63.11195 (a) An electric utility steam generating unit

Inclusion of this exemption would also necessitate inclusion within the Area Source MACT of the definition of electric utility steam generating unit, currently proposed for inclusion in the Boiler MACT.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Gary Melow

Commenter Affiliation: Michigan Biomass

Document Control Number: EPA-HQ-OAR-2006-0790-1917.1

Comment Excerpt Number: 3

Comment: Michigan has three wood-fired power plants that are considered utility units under the CAIR Program based on the fact that they generate over 25 MW electricity for sale and use fossil fuel as a startup fuel. Two of these sources are minor sources for HAP. We are presuming that these sources would then be considered “industrial” boilers for purposes of this rule. However, we note that our SIC is not listed under potential affected industry and the definition of

“industrial boiler” is quite different than the definition of “utility boiler.” We request confirmation that boilers considered utility units in other regulations (including major source MACT rule) that are not major sources of HAP would be regulated instead as an industrial boiler under the minor source MACT rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Jeff A. McNelly

Commenter Affiliation: ARIPPA

Document Control Number: EPA-HQ-OAR-2006-0790-1988.1

Comment Excerpt Number: 3

Comment: As of the date of publication of the Proposed Rule, EPA has not finalized its proposed regulation of HAP emissions from EGUs. Pending promulgation of that final rule, the scope and applicability of the EGU MACT standards remains an uncertainty. ARIPPA fully anticipates that the final EGU MACT will be consistent, in terms of applicability, with EPA’s regulation of EGUs under other CAA regulatory standards, and therefore that the final EGU MACT will apply to the ARIPPA facilities. Pursuant to the terms of the Proposed Rule, therefore, the Boiler MACT would be inapplicable. However, to the extent that EPA surprisingly establishes different applicability standards under the EGU MACT, and such final regulation is not applicable to the ARIPPA plants, then the Area Source MACT could become applicable to the ARIPPA facilities.

Based on this current state of regulatory uncertainty, ARIPPA cannot provide comprehensive comments on the Proposed Rule, and expressly reserves the right to provide comments and participate in the rulemaking process for the Area Source MACT if EPA’s regulatory approach would result in the applicability of the Area Source MACT to ARIPPA plant operations.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Jeff A. McNelly

Commenter Affiliation: ARIPPA

Document Control Number: EPA-HQ-OAR-2006-0790-1988.1

Comment Excerpt Number: 5

Comment: The United States Court of Appeals for the D.C. Circuit has consistently interpreted the implementation by EPA of Section 112 for developing MACT standards as consisting of a “two-step process.” First, EPA “set[s] the minimum stringency standards required by [CAA] section [112](d)(3) for new and existing sources” (these standards are known as the emission “floors”). See, e.g., Nat’l Lime Ass’n v. EPA, 233 F.3d 625, 629 (D.C. Cir. 2000). Second, EPA

“determines, considering cost and [non-air quality health and environmental impacts and energy requirements], whether stricter standards are ‘achievable’ (these standards are referred to as “beyond-the-floor”).” Id. (quoting 42 U.S.C. § 7412(d)(2)). See also *NRDC v. EPA*, 489 F.3d 1250, 1254 (D.C. Cir. 2007); *Sierra Club v. EPA*, 479 F.3d 875, 877 (D.C. Cir. 2007); *Mossville Env'tl. Action Now v. EPA*, 370 F.3d 1232, 1235 (D.C. Cir. 2004); *Cement Kiln Coalition v. EPA*, 255 F.3d 855, 859 (D.C. Cir. 2001). In the context of evaluating MACT floors, the Court has acknowledged that EPA is required to “make a reasonable estimate of the performance of the top 12 percent of units.” *Cement Kiln*, 255 F. 3d at 861-62 (citing *Sierra Club v. EPA*, 167 F.3d 658 (D.C. Cir. 1999)). The Court also clarified that “the method the Agency selects must allow a reasonable inference as to the performance of the top 12 percent of units”, and “that EPA must show not only that it believes its methodology provides an accurate picture of the relevant sources’ actual performance, but also why its methodology yields the required estimate.” *Cement Kiln*, 255 F. 3d at 862.

The Proposed Rule does not reflect any consideration of emissions from EGUs in EPA’s derivation of proposed MACT standards for either new or existing sources, presumably because EPA does not intend that such sources would be governed by the Area Source MACT. If, however, the Area Source MACT ultimately applies to any EGU (based on the final scope of the EGU MACT or otherwise), the emission standards included within the Proposed Rule would not satisfy statutory or regulatory standards for MACT derivation, if applied to coal-fired (including coal refuse-fired) EGUs.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Terry Walmsley

Commenter Affiliation: Fibrowatt LLC

Document Control Number: EPA-HQ-OAR-2006-0790-2201.1

Comment Excerpt Number: 1

Comment: As stated in the Major Source Boiler Rule at 32008 and in the Area Source Boiler Rule at 31899, the applicability of such proposed rules are linked in parallel with a proposed rule at 75 Fed Reg. 31845 (2010) related to the "Identification of Non-Hazardous Secondary Materials that are Solid Wastes." On August 3, 2010 Fibrowatt submitted comments to this proposed Solid Waste Identification Rule (Docket No. EPA—HQ—RCRA-2008-0329) supporting a position that poultry litter is a ‘traditional fuel’ [See submittal EPA-HQ-OAR-2006-0790-2201.2 for Solid Waste comment.]

. In these comments, Fibrowatt (a) provided supporting information on the fuel characteristics of poultry litter, (b) demonstrated that poultry litter is procured, transported, managed, and processed as a fuel, and (c) demonstrated that poultry litter has been used successfully as the principal fuel in multiple large-scale, modern biomass power plants since the early 1990’s. Fibrowatt submits these comments on the basis that a Fibrowatt facility combusting poultry litter as a fuel, alone or in combination with other forms of previously identified fuels, should

ultimately be regulated under either the Major Source Boiler Rule or the Area Source Boiler Rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Scott Davis

Commenter Affiliation: Arizona Public Service Company

Document Control Number: EPA-HQ-OAR-2006-0790-2233.1

Comment Excerpt Number: 1

Comment: Electric Steam Generating Units Located at Area Sources

APS believes that Electric Steam Generating Units (ESGUs) as defined in Section 112(a)(8) of the CAA [Footnote: An electric steam generating unit is defined in 112(a)(8) of the CAA as: "Any fossil fuel fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electric output to any utility power distribution system for sale shall be considered an electric utility steam generating unit."] should be exempt from both the area source and major source rulemakings.

EPA states in the preamble for the Industrial, Commercial, and Institutional Boiler NESHAP for major sources that the CAA specifically requires fossil fuel-fired electric steam generating units to be reviewed separately and further explains that ESGUs will not be included in the proposed rulemaking. APS believes this also holds true for ESGUs located at area sources. Section 112(n)(1) of the CAA specifically requires EPA to develop NESHAP standards based on a study of the hazards to public health reasonably anticipated to occur as a result of emissions by ESGUs. It does not distinguish between area sources and major sources. Furthermore, EPA is moving forward with a separate rulemaking process for ESGUs where it is currently gathering data through an information collection request for future promulgation of ESGU MACT regulations.

It is APS's position that ESGUs should only be addressed under the ESGU MACT rulemaking and should not be included in the Industrial, Commercial, and Institutional Boiler NESHAP for major and area source rulemakings. Currently, the Industrial, Commercial, and Institutional Boiler NESHAP for major sources provides an exemption for ESGUs, but this is not the case in the Industrial, Commercial, and Institutional Boiler NESHAP for area sources. Therefore, APS requests that EPA add language excluding ESGUs from NESHAP regulations for area sources similar if not identical to the language used for major sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Mat Ehrhardt
Commenter Affiliation: California Air Pollution Control Officers Association
Document Control Number: EPA-HQ-OAR-2006-0790-1995.1
Comment Excerpt Number: 2

Comment: While the Major Source MACT for industrial, commercial, and institutional boilers specifically identifies the NAICS code of 221, Utility Providers, as an applicable category, the Area Source MACT for such boilers does not. We believe that this NAICS code would encompass Biomass-toEnergy (BTE) facilities, and therefore we are concerned that this lack of specificity in the Area Source MACT applicability discussion may lead to confusion. For instance, while we are submitting significant comments below based on our supposition that such operations are covered under the Area Source MACT, others may be assuming that they are not covered and are therefore not providing comment.

We believe EPA should clarify in the regulation whether or not biomass boilers covered by the Area Source MACT include those providing utility power; if so, EPA should provide additional opportunity for comment from interested parties.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: John M. Irving
Commenter Affiliation: Burlington Electric Department
Document Control Number: EPA-HQ-OAR-2006-0790-2171.1
Comment Excerpt Number: 2

Comment: McNeil Station is a Part 75 Acid Rain unit. The Acid Rain regulations consider our unit an electric generating unit. However, the area source rule omitted a definition for "fossil fuel-fired electric utility steam generating unit." Is it EPA's intention to include electric generating units > 25 MW in the Area Source Rule? Repeated attempts to receive clarification from the EPA regarding rule applicability to our facility were deferred.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Terry Walmsley
Commenter Affiliation: Fibrowatt LLC
Document Control Number: EPA-HQ-OAR-2006-0790-2201.1
Comment Excerpt Number: 2

Comment: As stated in Fibrowatt's comments to the Solid Waste Identification Rule, poultry litter should be identified as a fuel and therefore its use as a fuel would be regulated by either the Major Source Boiler Rule or the Area Source Boiler Rule, depending on such a plant's potential to emit hazardous air pollutants ("HAPs"). As suggested by Fibrowatt's comments to the Solid Waste Identification Rule, a Fibrowatt plant is developed for the primary purpose of recovering thermal energy in the form of steam for electrical generation. Commercial success is predicated on securing a viable power purchase agreement with a regulated utility in conjunction with the utilization of the combustion co-product (i.e. ash product) utilized as a feedstock for fertilizer manufacturing.

By definition, boilers in the Major Source Boiler Rule at 32063 and the Area Source Boiler Rule at 31930 are characterized as devices that use controlled flame combustion and have the prime purpose of recovering thermal energy in the form of steam or hot water. Under the Major Source Boiler Rule at 32063 and the Area Source Boiler Rule at 31930, "...animal manure, including litter and other bedding materials..." is specifically included in the definition of biomass. On this basis, a Fibrowatt facility that utilizes poultry litter (a mixture of manure and cellulosic bedding material) as a biomass fuel in conjunction with other forms of identified traditional biomass fuels should be regulated under the Major Source Boiler Rule and the Area Source Boiler Rule as Biomass Boilers. Under the Major Source Boiler Rule, based on the use of spreader-stoker combustion technology, such a facility should be regulated in the Biomass Stoker Boiler Category.

Fibrowatt developed, built, and now operates the Fibrominn Biomass Power Plant in Benson, Minnesota. The Fibrominn facility is the first poultry litter-fueled power plant in the United States and has been in continuous operation since its initial start-up in 2007. The Fibrominn plant is a 55MW stoker-fired biomass power plant that utilizes poultry litter (identified in the Solid Waste Identification Rule as a non-cellulosic biomass material) as its primary fuel in combination with a number of other cellulosic biomass materials like clean wood chips, clean forestry harvesting residue, corn stover, corn cobs, sunflower hulls, and other agricultural by-products. Poultry litter typically represents seventy to ninety percent of the overall fuel stream on a weight basis.

Based on facility start-up date, operating capacity, and emissions data, this facility would be characterized as an existing facility and would be Major Source under the Major Source Boiler Rule. On the basis of characterization of poultry litter as a fuel, as supported by comments to the Solid Waste Identification Rule, and classification of such unit as biomass boiler, EPA would have to properly reflect the Fibrominn Biomass Power Plant within the dataset of existing units under the Major Source Boiler Rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Commenter Name: Pamela F. Faggert

Commenter Affiliation: Dominion

Document Control Number: EPA-HQ-OAR-2006-0790-2257.1

Comment Excerpt Number: 6

Comment: The proposed rule establishes a 2-ppm CO limit for large (:10 mmBtu.hr) oil-fired auxiliary boilers. In the electric utility industry, these auxiliary boilers are typically used to generate the steam necessary to bring a main electric generating unit (EGU) on line (during startup). Since auxiliary boilers are primarily operated during unit startup, operation for many of these boilers is typically very limited (e.g., on the order of 500 operating hours or less in a calendar year).

For units with such limited operation, work practice standards that EPA has proposed for smaller units would be more appropriate, feasible and much less costly.

Response: See response to comment EPA-HQ-OAR-2006-0790-0834.1, excerpt 1 for discussion of EGU legal and applicability questions.

Legal/Applicability: Exemptions

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 18

Comment: Used oil properly recycled as a fuel pursuant to 40 CFR Part 279 should be considered exempt traditional fuel under the h waste identification rule and exempt from many new requirements under the area source NESHAP.

Response: An area source burning used oil will be subject to GACT standards as a liquid-fired boiler, unless it otherwise is subject to another one of the solid fuel categories. The requirement to develop a list of pollutants that have urban impacts does not preclude the agency from regulating those pollutants not only in urban areas but also in rural areas. By its terms, CAA section 112(c)(3) says regulate these pollutants and not these pollutants solely when emitted at urban sources. In order to meet the requirements of CAA sections 112(c)(3) and 112(c)(6), EPA cannot exempt particular industries that are part of the listed source category. We have clarified in our final rule that boilers fired by non-hazardous secondary material that are not solid wastes will be subject to standards under the final rule. Existing limited use boilers that fire biomass or liquid fuel will be subject only to tune-up and, if large enough, energy assessment requirements. The final rule clarifies that hot water heaters are not part of the source category by adding an explicit exemption. Recovery boilers would be exempt because they are regulated under another section 112 MACT standard. Process heaters are not subject to the area source boiler rule, nor are boilers at major sources. Only larger coal-fired (and other nonbiomass solid fueled) boilers that are over 10 MMBtu have numeric limit for CO under the area source boiler. Electrically fired and gas fired boilers are exempt from the final rule.

Commenter Name: Fred T Simpson
Commenter Affiliation: Scotch and Gulf Lumber, LLC
Document Control Number: EPA-HQ-OAR-2006-0790-1061.1
Comment Excerpt Number: 1

Comment: One of the emission units operated by Scotch Gulf Lumber is located near Jackson, Alabama in a relatively rural area. Because the purpose of the proposed GACT rule is to control emissions of urban air toxics, Scotch Gulf Lumber contends that EPA should exempt source boilers located in non-urban areas from requirements of Boiler GACT.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Duane C. Feagley
Commenter Affiliation: Pennsylvania Anthracite Council
Document Control Number: EPA-HQ-OAR-2006-0790-1052.1
Comment Excerpt Number: 4

Comment: We recommend that the EPA exempt facilities utilizing Anthracite coal from any new requirements that are developed. Or at a minimum, facilities already utilizing anthracite coal should be grandfathered from any new requirements.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Mike Hubbard
Commenter Affiliation: National Council of Textile Organizations
Document Control Number: EPA-HQ-OAR-2006-0790-1062
Comment Excerpt Number: 4

Comment: The National Council of Textile Organizations and its member companies support efforts to maintain strong environmental standards, but this proposed rule is not the way to do it. We strongly urge EPA to remove the textile industry from the minor sources covered by this rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Houston Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 52

Comment: It is my understanding that loopholes can be found, and it appears that this particular proposal creates loopholes for the burning -- local burning of all these different substances; tires, plastics, et cetera, and, you know, having -- having grown up next to the refineries and, you know, most likely being affected by the air standards there, I can say that this is most likely going to lead to more -- more substances in the air and more particulate matter, carbon monoxide, and the different substances that help form the ozone. But I would just like to say that -- please reconsider these loopholes.

Please reconsider defining more carefully, and regulating more carefully these different proposed fuels, and do that with consideration to those that really have no control over -- personally have no control over what is happening in these plants, and in these boilers and incinerators because, you know, all we can do is vote and speak out such as at this hearing.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Russell A. Wozniak

Commenter Affiliation: The Dow Chemical Company

Document Control Number: EPA-HQ-OAR-2006-0790-1766.1

Comment Excerpt Number: 2

Comment: EPA Should Provide an Exemption from the Rule for Boilers that Combust a Liquid Fuel that Qualifies for the RCRA Comparable Fuels Exemption.

EPA should provide an exemption from the rule in Section 63.11195 for boilers or process heaters that combust a liquid fuel as the primary fuel provided that the liquid fuel qualifies for the RCRA Comparable Fuels Exemption. The RCRA Comparable Fuels Exemption requires these streams to be tested for about 100 constituents and the results must show either no-detect or very low concentrations. The data is then transmitted to the agency for approval and quarterly sampling is required to verify that the constituents of concern are not above the limits of concern. Thus, these streams already must meet stringent quality requirements.

The use of a RCRA Comparable Fuel presents a specific case and EPA should not thwart the use of these fuels by making boilers subject to the proposed stringent emission levels contained in Table 1 of the proposed rule for Units designed to burn oil.

EPA Should Add an Exemption for Hot Water Heaters - Similar to the MACT Rule (Subpart DDDDD).

EPA should add an exemption for hot water heaters in Section 63.11195 as some hot water heaters could be fueled by liquid fuel. EPA could use a definition similar to that proposed in 40 CFR 63.7575 for a Hot Water Heater. This exemption should be added since the area source rule should not be more stringent than the major source MACT rule. Proposed language follows:

Hot Water Heater means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by the combustion of gaseous or liquid fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210 °F (99 °C).

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Douglas J. Fulle

Commenter Affiliation: Oglethorpe Power Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-1798.1

Comment Excerpt Number: 14

Comment: Limited use boilers are common in the power sector. For example, power plant facilities often include an auxiliary boiler that provides on-site power for limited periods of time, such as during cold starts or "black starts" (starts when grid supplied electricity is unavailable). Imposing numeric emissions limitations on these boilers is not needed to protect health or the environment because the overall HAP emissions from these boilers would be just a fraction of the emissions expected from comparable boilers that are continuously used. In addition, the cost of the emissions controls needed to meet numeric emissions limitations on limited use boilers would be inordinate in comparison to the HAP reductions achieved. For these reasons, EPA should regulate these boilers under a GACT rule requiring only periodic tune-ups and operation according to good air pollution control practices.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners, CIBO

Document Control Number: EPA-HQ-OAR-2006-0790-1783.1

Comment Excerpt Number: 42

Comment: The Proposed Rule does not provide an exemption for hot water heaters. Hot water heaters are exempt from the Proposed Boiler MACT Rule and should also be exempted from the Proposed Rule. The preamble to the Proposed Boiler MACT Rule provides the following rationale for exempting hot water heaters:

The proposed rule would not regulate hot water heaters, as defined in this proposed rule, because such units are not part of the listed source categories. Many industrial facilities have office buildings located onsite which use hot water heaters. Such hot water heaters, by their design and operation, could be considered boilers since hot water heaters meet the definition of a boiler as specified in the proposed rule, because they are enclosed devices that combust fuel for the purpose of recovery energy to heat water. However, hot water heaters are more appropriately described as residential-type boilers, not industrial, commercial, or institutional boilers because their output (i.e., hot water) is intended for personal use rather than for use in an industrial, commercial, or institutional process. Moreover, since hot water heaters generally are small and use natural gas as fuel, their emissions are negligible compared to the emissions from the industrial operations that make such facilities major sources, and compared to boilers that are used for industrial, commercial, or institutional purposes. However, the primary reason that we are excluding hot water heaters is that hot water heaters are not part of the listed source category.

75 FR 32016

The ASME Code, Section IV-Rules for Construction of Heating Boilers, is applicable to hot water heating boilers and is, in our opinion, the standard that should be used to define a hot water heater consistent with industry standards. The ASME Code, Section IV is applicable to: "(a) steam boilers for operation at pressures not exceeding 15 psi; (b) hot water heating boilers and hot water supply boilers for operating at pressures not exceeding 160 psi and/or temperatures not exceeding 250°F, at or near the boiler outlet."

We recommend EPA specifically exempt hot water heaters from the area source rule and add a definition of hot water heater to read as follows:

Hot water heater means a closed vessel in which water is heated by combustion of liquid fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 pounds per square inch gauge (psig), including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 250°F (121°C) at or near the heater outlet.

This approach would eliminate the need to spend time or effort on units with insignificant emissions.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners, CIBO

Document Control Number: EPA-HQ-OAR-2006-0790-1783.1

Comment Excerpt Number: 43

Comment: The Proposed Rule does not provide an exemption for temporary boilers. CIBO recommends that EPA include in the final rule an exemption for temporary boilers as provided in the Proposed Boiler MACT Rule. See 75 FR 32050. EPA defines "temporary boiler" in the Proposed Boiler MACT Rule to mean

any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another. A temporary boiler that remains at a location for more than 180 consecutive days is no longer considered to be a temporary boiler. Any temporary boiler that replaces a temporary boiler at a location and is intended to perform the same or similar function will be included in calculating the consecutive time period.

75 FR 32065. Temporary boilers are generally rented, not owned by the area source. They are used in times of emergency and it is simply not feasible to impose emission standards on such units. EPA should provide the temporary boiler exemption for area sources just as it does for major sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners, CIBO

Document Control Number: EPA-HQ-OAR-2006-0790-1783.1

Comment Excerpt Number: 46

Comment: EPA has included in the Proposed Boiler MACT Rule an exemption for "recovery boiler[s]" covered under 40 CFR Part 63, subpart MM. 75 FR 32050. This exemption covers such units as duct burners on turbines. CIBO proposes that EPA include a similar exemption in this Proposed Rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Sharene Shealey

Commenter Affiliation: RRI Energy

Document Control Number: EPA-HQ-OAR-2006-0790-1839.1

Comment Excerpt Number: 1

Comment: The proposed rule provides no exemption for temporary boilers and thereby subjects temporary units to the same emission limitations, testing requirements, work practice standards, record keeping and reporting requirements as permanent sources. In contrast, the proposed major source Industrial-Commercial-Institutional Boiler and Process Heater NESHAP exempts temporary units from the standards of subpart DDDDD in section 63.7491(i). The major source ICI boiler rule defines a temporary boiler as follows (§63.7575):

Temporary boiler means any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another. A temporary boiler that remains at a location for more than 180 consecutive days is no longer considered to be a temporary boiler.

Any temporary boiler that replaces a temporary boiler at a location and is intended to perform the same or similar function will be included in calculating the consecutive time period.

EPA will not achieve the emission reductions required for this source category by regulating temporary sources. RRI strongly urges EPA to exempt temporary boilers from the standards of Subpart JJJJJ-National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: William C. Scott

Commenter Affiliation: Collum's Lumber Products, LLC

Document Control Number: EPA-HQ-OAR-2006-0790-1796.1

Comment Excerpt Number: 7

Comment: Our facility is located in rural SC, and since the purpose of the rule is to control urban air toxics EPA should exempt area source boilers in non-urban areas.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: David J. Prior

Commenter Affiliation: New York State Energy Research and Development Authority, NYSERDA

Document Control Number: EPA-HQ-OAR-2006-0790-1913.2

Comment Excerpt Number: 8

Comment: The very low fine particle emission rate for boilers burning #2 fuel oil with 15 ppm S and the new laws to limit #2 fuel oil in New York State to 15 ppm sulfur are comparable to the emission rate for natural gas-fired boilers. EPA should treat all boilers burning #2 fuel oil (and

biodiesel meeting the appropriate ASTM requirement) in the same manner as natural gas for the purposes of the Area Source Boiler Rule, regardless of size. The very low trace metal hazardous air pollutant concentrations reported by NESCAUM supports this recommendation (NESCAUM, 2010)[Footnote: Data provided by NESCAUM under NYSERDA supported project.]

When burned in a commercial or industrial boiler to produce heat, different blends of petroleum fuels and different wood fuel types can have very different fine particle emission rates due to both the combustion design of the heating system and the fuel composition. Figure 1 below shows the emission rates for various fuels and combustion systems. [See submittal for Figure 1] After natural gas, #2 fuel oil[With respect to these comments, biodiesel should be considered a #2 low sulfur (<500 ppm) or ultra low sulfur fuel if it meets the respective ASTM requirements pertaining to biodiesel. Although biodiesel is different from #2 oil, the emissions performance surpasses that of ultra low sulfur diesel. (Macor, Pavnello, 2008)], or distillate, is the most common heating fuel and has an emission rate of approximately 0.008 lb/mmBtu. The ultra-low, or 15 ppm sulfur #2 heating oil which will be required in New York in July 2012, has a fine particle emission rate of .000099 lb/mmBtu- about the same as the emissions rate for natural gas-fired boilers.[Footnote: McDonald, Roger. 2009. Evaluation of Gas, Oil, and Wood Pellet Fueled Residential Heating System Emissions Characteristics. Brookhaven National Laboratory, Upton, NY. BNL-91286-2009-IR.]]

Trace Metal Composition of Oil and Wood Fuels- Emissions of trace metals were measured in boiler stack tests of wood chip and oil-fired boilers by Northeast States for Coordinated Air Use Management (NESCAUM). The Maximum Achievable Control Technology (MACT) is for 8 metals: Mercury, arsenic, beryllium, cadmium, lead, chromium, manganese, and nickel.[See submittal Table 2 showing emissions for 8 metals.]

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Matthew Todd and David Friedman

Commenter Affiliation: American Petroleum Institute (API) and National Petrochemical and Refiners Association (NPRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2025.1

Comment Excerpt Number: 9

Comment: Waste heat boilers are appropriately excluded from the definition of boiler. However, waste heat boiler is defined in §63.11237 not to include waste heat boilers that have supplemental firing, where 750% of the heat duty of the waste heat boiler comes from supplemental firing. It is unreasonable to consider such supplementary fired waste heat systems as boilers for the purposes of this rule, because their characteristics were not considered in the rulemaking record, they are not represented in the database, the rule compliance procedures are inappropriate for such equipment, the controls considered for normal boilers and process heaters are not applicable and the interactions with other NESHAP rules have not been addressed.

The data record for this proposal does not address supplementary fired waste heat boilers or demonstrate what MACT would be for such systems. Because the configuration of a supplementary fired system is totally different than that of a traditional boiler, information from traditional boilers cannot be extended to supplementary fired boilers. Nor would we expect similar combustion characteristics, since the flame from a supplementary fired waste heat system occurs in a different atmosphere and under different temperature, pressure and composition conditions than those in a traditional boiler. For instance, the O₂ content of the flame zone for a supplementary fired burner is dependent on the O₂ content of the exhaust gas from the primary combustion device and is typically well below the O₂ content of air. This characteristic alone, significantly impacts the generation of organic HAP, CO and NO_x emissions.

Combustion emissions from supplementary fired waste heat systems are exhausted from the stack of the combustion device (often a process heater or gas turbine) from which the waste heat is being recovered. Thus, the emissions from the two devices are combined. The stack monitoring and testing procedures specified in the proposal would not work, because the emissions from the supplementary fired system cannot be distinguished from the emissions of the other combustion source.

Furthermore, add-on controls for supplementary fired equipment would be much different than for normal boilers, because they would 1) be handling gas from two types of combustion sources, 2) the combined exhaust system is often constructed differently than is the exhaust system from a traditional boiler, 3) the combined exhaust gas has different properties than traditional boiler exhaust gas, 4) the backpressure exerted by add-on controls increases fuel use and emissions from the primary combustion device as well as the waste heat system, and 5) the add-on control could interfere with the add-on NO_x controls that are already in place for many such systems. For all of these reasons, the controls evaluated in this rulemaking are not appropriate for or reflective of the controls that would be used for supplementary fired waste heat systems.

Finally, the primary combustion source is usually already subject to a set of requirements (e.g., the NSPS D subparts, NSPS GG and KKKK, SIP requirements) and the Agency has not considered or addressed how this proposal would interact with those existing requirements.

Overall, we do not believe the Agency has shown that any supplementary fired waste heat systems have been considered in any portion of this rulemaking or that this NESHAP proposal was developed with such units considered. Thus, there is no technical or legal basis for applying the proposed standards to supplementary fired boilers of any firing percentage.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Britt S. Fleming

Commenter Affiliation: Auto Goup

Document Control Number: EPA-HQ-OAR-2006-0790-1916.1

Comment Excerpt Number: 11

Comment: THE PROPOSED APPLICABILITY EXCLUSION FOR BOILERS AND PROCESS HEATERS COVERED BY OTHER MACT RULES PREVENTS OVERLAP AND REDUCES POTENTIAL CONFUSION.

In the preamble, EPA describes the proposal as covering industrial boilers, institutional and commercial boilers, and process heaters. EPA goes on to state that “[t]hese source categories potentially include combustion units that are already regulated by other MACT standards under CAA sections 112 or 129. Therefore, [EPA is] excluding from this proposed rule any units that are subject to regulation in another MACT standard established under CAA section 112 or a standard established under CAA section 129.”[75 Fed. Reg. at 32,016] The intent to exclude units covered by other MACT standards is clearly set out in proposed § 63.7491(h), which states that “[a]ny boiler or process heater specifically listed as an affected source in another standard(s) under 40 CFR part 63” would not be subject to the requirements of the subpart.[Id. at 32,050] EPA’s proposed approach in the C.F.R. language for addressing the potential overlap of MACT requirements is consistent with the approach used by the agency in the 2004 final MACT rule for boilers and process heaters and reflects the concerns and issues that were raised by stakeholders in that rulemaking. The Auto Group supports EPA’s efforts to prevent duplicative (and potentially conflicting) regulation of the same units and endorses EPA’s use of the same proposed C.F.R. language addressing this issue as used in the 2004 Boiler MACT.

Companies participating in the Auto Group are subject to the requirements of other MACT standards (e.g., Auto and Light-Duty Truck Surface Coating, Subpart IIII; Surface Coating of Plastic Parts and Products, Subpart PPPP; Surface Coating of Miscellaneous Metal Parts, Subpart MMMM). For these MACT standards, each rule imposes emission requirements that affect the coating application and curing operations for the coatings applied to these substrates and limit volatile organic HAP from the overall coating process. The temperatures and humidity of the air in the coating spraybooth, and the temperature of the curing operations are an integral and critical part of the overall coating process. Additionally, emission control equipment utilized to oxidize VOC and HAP emissions from both paint spraybooths and curing ovens consume natural gas. The temperature and humidity of the air in the spraybooths must be closely regulated to assure the proper application of the coating materials. Heaters are used to assure that spraybooth air temperatures and humidity levels are kept at levels that allow the proper thickness of coating and its even distribution on the surface. Likewise, the curing ovens and flash-off areas also are critical to the coating operation. These ovens are heated using both direct and indirect gas-fired burners to the temperature necessary to provide proper curing of the coatings applied in the spraybooths.

Each of the MACT standards mentioned above covers the spraybooths (including related supply air equipment) and curing ovens/flash-off areas in vehicle/component part manufacturing facilities. For example, the provisions of the Auto and Light-Duty Truck Surface Coating MACT (Auto MACT) specifically list spraybooths and curing ovens.[See 40 C.F.R. § 63.3082(b)(a).] Under the Auto MACT, the affected source includes “all coating operations as defined in § 63.3176.”[Id] “Coating operation,” as defined in that provision, means “equipment used to apply coating to a substrate (coating application) and to dry or cure the coating after application. A single coating operation always includes at least the point at which a coating is applied and all

subsequent points in the affected source where organic HAP emissions from that coating occur.”[40 C.F.R. § 63.3176 (emphasis added).] The applicability section of the Auto MACT also specifically refers to the “paint shop” as the affected source when referring to whether the affected source is new, reconstructed or existing. “Paint shop” is a broad term, which is defined in the rule as “the collection of all areas at the facility in which new automobile or new light-duty truck bodies, or body parts for new automobiles or new light-duty trucks are phosphated and coated (including application, flash-off, drying and curing of electrodeposition primer, primer surfacer, topcoat, final repair, glass bonding primer, glass bonding adhesive, deadener, adhesives and sealers).”[Id. (emphasis added). The definition also includes “all coating operations added to the affected source pursuant to § 63.3082(c) [metal parts or plastic parts surface coating]; all areas at the facility in which substrates or equipment are cleaned relating to the coating of new automobile or new light duty truck bodies, the coating of body parts for new automobiles or new light duty trucks, or coating operations added to the affected source pursuant to § 63.3082(c); and all areas at the facility used for storage, mixing, conveying and waste handling of coatings, thinners and cleaning materials related to the coating of new automobile or new light-duty truck bodies, the coating of body parts for new automobiles or new light-duty trucks, or coating operations added to the affected source pursuant to § 63.3082(c).” Id.] It is clear from the Auto MACT that boilers and process heaters (both direct and indirect) that are a part of the paint shop are part of the affected source regulated by that MACT standard.

Both the Miscellaneous Metal Parts and Products MACT and the Plastic Parts and Products MACT include curing in the definition of a coating operation that is part of an affected source under each rule. The Miscellaneous Metal Parts MACT states that the affected source includes all coating operations, as defined in § 63.3981.[40 C.F.R. § 63.3882(b)(1) emphasis added).] The Plastic Parts MACT states that the affected source includes all coating operations, as defined in § 63.4581.[40 C.F.R. § 63.4482(1) (emphasis added).] In both rules, “coating operation” is identically defined as:

equipment used to apply cleaning materials to a substrate to prepare it for coating application (surface preparation) or to remove dried coating; to apply coating to a substrate (coating application) and to dry or cure the coating after application; or to clean coating operation equipment (equipment cleaning). A single coating operation may include any combination of these types of equipment, but always includes at least the point at which a given quantity of coating or cleaning material is applied to a given part and all subsequent points in the affected source where organic HAP are emitted from the specific quantity of coating or cleaning material on the specific part.[40 C.F.R. § 63.4581 (emphasis added) (Plastic Parts MACT); 40 C.F.R. § 63.3981 (emphasis added) (Metal Parts MACT).]

Thus, curing ovens and other process heaters related to the application, drying or curing of coatings are part of the affected source covered by these MACT standards as well.

As the quoted language above demonstrates, process heaters and ovens related to surface coating are specifically a part of the affected source covered by these other MACT standards. EPA’s proposed exclusion of units listed as part of another MACT source helps to clarify which MACT standards are applicable to specific process heaters and other equipment and avoids confusion and potentially duplicative or conflicting requirements.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Gary Rubenstein

Commenter Affiliation: Kauai Island Utility Cooperative, KIUC

Document Control Number: EPA-HQ-OAR-2006-0790-2028.1

Comment Excerpt Number: 11

Comment: Boilers located remotely, away from residential areas, present a lower health risk than those located in densely populated areas. Consideration should be given to excluding boilers that do not present significant health risks from retrofit requirements under this rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: James P. Brooks

Commenter Affiliation: Maine Department of Environmental Protection

Document Control Number: EPA-HQ-OAR-2006-0790-1915.1

Comment Excerpt Number: 13

Comment: The proposed Major Source Boiler MACT provides an exemption for “temporary boilers.” This exemption should also be included in the Area Source Boiler MACT, and should be expanded to include boilers that are permanently located at a facility but used on a very limited basis as back-up boilers. It is infeasible to conduct the required testing on these units due to the short and infrequent nature of their operation. Limited use boilers should be defined as those operated for no more than 500 hours per year.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Matthew Todd and David Friedman

Commenter Affiliation: American Petroleum Institute (API) and National Petrochemical and Refiners Association (NPRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2025.1

Comment Excerpt Number: 14

Comment: Proposed §63.7491(j) of the major source proposal excludes temporary boilers. Temporary boiler is defined in §63.7575 as “any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another. A temporary boiler that remains at a location for more than 180 consecutive days is no longer considered to be a

temporary boiler. Any temporary boiler that replaces a temporary boiler at a location and is intended to perform the same or similar function will be included in calculating the consecutive time period.” This exemption from the major source proposal should be added to the area source proposal, with the revisions we recommend in Comment I.B.2 of our comments on the major source proposal. [See DCN: EPA-HQ-OAR-2002-0058-2960.1 for comments] Area sources are even more likely to use such temporary boilers than are major sources, since area sources are less likely to have adequate backup boiler capacity to handle all contingencies than are major sources.

Some boilers, while permanently installed, only operate at significant firing rates seasonally, during emergency situations or as a short-term backup during outages of other steam producers at a site or in support of operations that only occur occasionally. We believe there is no environmental justification for applying the proposed requirements to such intermittent operations and request they be added to the exemption list in §63.11195. We recommend boilers that operate less than 30 days per calendar year or that operate at less than 10% of their design capacity as an annual average be exempted from the rule.

Significant CO increases begin occurring at firing rates of 30% of design or less depending on the particular unit. For boilers, the requirements of the National Fire Protection Act (NFPA) specify the minimum total airflow at which a boiler can operate, which is independent of the boiler load. This value is commonly 25 or 30 percent of the total airflow. As a result, boilers that are operating at loads less than 25 to 30 percent, experience increasing levels of excess air because the fuel flow is decreasing with load, but the air flow remains fixed. The amount of excess air can become sufficiently high that it acts as a heat sink and reduces the flame temperature. The cooling of the flame slows the combustion kinetics, and often produces higher CO emissions. Since the proposed emission limits and the rule analyses do not consider or address such operations, provisions are needed to exempt such situations from the rule requirements.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: James P. Brooks

Commenter Affiliation: Maine Department of Environmental Protection

Document Control Number: EPA-HQ-OAR-2006-0790-1915.1

Comment Excerpt Number: 14

Comment: We recommend that EPA provide an exemption for boilers firing ultra-low sulfur #2 fuel oil, similar to the exemption proposed for natural gas. Many regional haze and other control strategies implemented across the country have required facilities to utilize distillate fuel with a sulfur content of 15 ppm or less. We believe this will produce low emission levels similar to natural gas-fired units, and will eliminate the substantial economic disadvantage faced by Maine facilities unable to obtain natural gas.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Matthew Todd and David Friedman

Commenter Affiliation: American Petroleum Institute (API) and National Petrochemical and Refiners Association (NPRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2025.1

Comment Excerpt Number: 17

Comment: We strongly support the proposal to exclude 1) boilers that are already subject to §112 or 129 (Solid Waste Combustion) requirements, 2) boilers required to have a permit under section 3005 of the Solid Waste Disposal Act, and 3) boilers used for R&D purposes. No purpose would be served by interfering with research and development activities or by having multiple sets of requirements apply to boilers regulated under other air toxics rules.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Matthew Todd and David Friedman

Commenter Affiliation: American Petroleum Institute (API) and National Petrochemical and Refiners Association (NPRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2025.1

Comment Excerpt Number: 21

Comment: At 75 FR 32016 (June 4, 2010), EPA explains why it excludes hot water heaters from the major source proposal, as follows.

The proposed rule would not regulate hot water heaters, as defined in this proposed rule, because such units are not part of the listed source categories. Many industrial facilities have office buildings located onsite which use hot water heaters. Such hot water heaters, by their design and operation, could be considered boilers since hot water heaters meet the definition of a boiler as specified in the proposed rule, because they are enclosed devices that combust fuel for the purpose of recovery energy to heat water. However, hot water heaters are more appropriately described as residential-type boilers, not industrial, commercial, or institutional boilers because their output (i.e., hot water) is intended for personal use rather than for use in an industrial, commercial, or institutional process. Moreover, since hot water heaters generally are small and use natural gas as fuel, their emissions are negligible compared to the emissions from the industrial operations that make such facilities major sources, and compared to boilers that are used for industrial, commercial, or institutional purposes. However, the primary reason that we are excluding hot water heaters is that hot water heaters are not part of the listed source category. Consequently, we are including a definition of hot water heaters that includes fuel, size, pressure

and temperature limitations that we believe are appropriate to distinguish between residential-type units and industrial, commercial, or institutional units.

For all of the same reasons cited by EPA above, EPA should add the definition of hot water heater from the major source rule and exclude hot water heaters from this proposal.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 70

Comment: The proposed rule does not include an exemption for temporary boilers. We believe the rule should include such an exemption, as the proposed Boiler MACT does. Forest products facilities periodically use portable/transportable boilers to supply/supplement other site steam supplies. These boilers, which are typically rented and used on a temporary basis, are portable shop-fabricated package design units. They are typically used when there is a mechanical problem that takes a boiler out of service for a period of time to complete repairs or to maintain steam balances during planned unit turnarounds. Because they are used on a limited time basis, portable units are typically not fully integrated with site control systems.

Most portable/transportable boilers are owned by a rental company, not the stationary source. Rental boilers may or may not be operated by the facility owner/operator. These temporary boilers will typically only fire gas or liquid fossil fuels (natural gas or distillate oil) which may be cleaner than the boiler(s) they are temporarily replacing. In addition, these units often do not have exhaust stacks that meet EPA Method 1 requirements for application of test methods.

Since portable/transportable boilers are required to be used, for a temporary time period, on either an emergency basis or to cover planned unit maintenance downtimes, it is not practical to comply with all of the MACT rule requirements that are more suitable for permanent fixed units. Therefore, we recommend that EPA include an exclusion for temporary boilers under the GACT rule similar to the exclusion in the MACT rule (exclude temporary boilers from the regulation as long as they are onsite for no more than 180 consecutive days). In addition, for portable units that are on a facility for more than 180 days, but may be moved from location to location within a site and stay at a particular location for less than 180 days, EPA should require only management or work practices (e.g., annual tune-up).

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 71

Comment: Hot water heaters are exempt from the Boiler MACT rule and should also be exempted from the area source rule. The preamble to the proposed Boiler MACT rule (75FR32016) provides the following rationale for exempting hot water heaters.

“The proposed rule would not regulate hot water heaters, as defined in this proposed rule, because such units are not part of the listed source categories.

Many industrial facilities have office buildings located onsite which use hot water heaters. Such hot water heaters, by their design and operation, could be considered boilers since hot water heaters meet the definition of a boiler as specified in the proposed rule, because they are enclosed devices that combust

fuel for the purpose of recovery energy to heat water. However, hot water heaters are more appropriately described as residential-type boilers, not industrial, commercial, or institutional boilers because their output (i.e., hot water) is intended for personal use rather than for use in an industrial, commercial, or institutional process. Moreover, since hot water heaters generally are small and use natural gas as fuel, their emissions are negligible

compared to the emissions from the industrial operations that make such facilities major sources, and compared to boilers that are used for industrial, commercial, or institutional purposes.

However, the primary reason that we are excluding hot water heaters is that hot water heaters are not part of the listed source category.”

The ASME Code, Section IV- Rules for Construction of Heating Boilers, is applicable to hot water heating boilers and is, in our opinion, the standard that should be used to define a hot water heater consistent with industry standards. The ASME Code, Section IV is applicable to: “(a) steam boilers for operation at pressures not exceeding 15 psi; (b) hot water heating boilers and hot water supply boilers for operating at pressures not exceeding 160 psi and/or temperatures not exceeding 250°F, at or near the boiler outlet.”

We recommend EPA specifically exempt hot water heaters from the area source rule and add a definition of hot water heater to read as follows:

Hot water heater means a closed vessel in which water is heated by combustion of gaseous or liquid fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 pounds per square inch gauge (psig), including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 250°F (121°C) at or near the heater outlet.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Bob Perry

Commenter Affiliation: FirstEnergy Corp

Document Control Number: EPA-HQ-OAR-2006-0790-1959.1

Comment Excerpt Number: 1

Comment: EPA should exempt area source boilers that have capacity factors less than 10%. At its nuclear plant sites, FENOC has a number of liquid fired (No.2 fuel oil) boilers that exceed the 10 mmBtu/hr limit but operate very infrequently. These boilers are not covered by the major source rules as the nuclear facility is not major for hazardous air pollutant (HAPs) emissions. None of these boilers are typically operated more than 10 percent of the time annually and in most cases less than 5 percent. EPA's Proposed Rule requiring compliance with very stringent CO emission limits utilizing expensive continuous monitoring techniques by these limited use boilers is clearly unnecessary, exceedingly costly and provides very little environmental benefit. HAPs emissions, not to mention other criteria pollutants emitted from these oil-fired boilers, are extremely low due to their very low operating time. Any metallic HAPs emissions are directly traceable to the oil combusted in the boiler. Commercially available sources of No.2 fuel oil contain negligible amounts of mercury as well as all other metallic HAPs. There is little reason to regulate these units for metallic HAPs. Including a very stringent CO limit as a surrogate for organic HAPs is unnecessary. EPA should require yearly work practices, such as a tune-up. EPA should create a limited use subcategory for boilers combusting distillate fuel that would subject those units to no more than the work practice standards noted above. The limited use subcategory should have a 10% capacity factor threshold. Eligibility for this subcategory should be determined based on 10% of the maximum hourly heat input of the boiler multiplied by 8760.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Brad Cooley

Commenter Affiliation: GDF SUEZ Energy Generation North America, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-2134.1

Comment Excerpt Number: 2

Comment: EXEMPTION FOR ELECTRIC UTILITY STEAM GENERATING UNITS: The proposed rule does not include an exemption for electric utility steam generating units. This exemption is included in the proposed Boiler MACT rule. GSEGNA supports including this same exemption into this proposed rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Bob Perry

Commenter Affiliation: FirstEnergy Corp

Document Control Number: EPA-HQ-OAR-2006-0790-1959.1

Comment Excerpt Number: 3

Comment: Area source boilers located at nuclear plants under the jurisdiction of the Nuclear Regulatory Commission should be exempt from area source MACT requirements. These boilers, as noted earlier, operate on a very limited basis, and adding additional regulation affecting these boilers provides no significant environmental benefit while creating an unnecessary regulatory burden. These boilers only operate for limited periods such as during plant startup or shutdown, and short periods when additional plant heating is needed when the nuclear power plant is not operating. FENOC's nuclear units operate with a very high availability factor. Two of the units shut down for refueling only every two years, the other two units shut down for refueling every 18 months. Any proposed modifications to the nuclear facilities would also need to be reviewed against the requirements in 10 CFR 50.59, and be subject to the extensive design control and modification processes governing the systems and equipment at our nuclear plants. These area source boilers are solely for the support of the nuclear power plant, and therefore should be excluded from the rule. Very preliminary estimates of possible capital costs to install monitors could easily exceed \$50,000 per boiler, and would incur ongoing operating and maintenance costs as well. Imposition of Proposed Rule will result in additional capital and ongoing operating costs with very little or no environmental benefit. To the extent that any emission limits must be retained for boilers in such limited use, annual testing should be eliminated and any required testing schedule should be flexible enough to preclude operation of the boilers for the sole purpose of testing.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Robert P. Strieter
Commenter Affiliation: The Aluminum Association
Document Control Number: EPA-HQ-OAR-2006-0790-1838.1
Comment Excerpt Number: 4

Comment: The Aluminum Association agrees with the EPA assessment that justifies not including emission limits or emission control technology requirements on the gas-fired boilers and process heaters that are included in the area source Boiler MACT rule.

Including gas-fired boilers for emission control requirements would not reduce emissions that do not occur, and therefore would add considerable cost to the requirements with no commensurate environmental benefits.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Brian Breaux
Commenter Affiliation: Louisiana Farm Bureau Federation, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1966.1

Comment Excerpt Number: 4

Comment: The Louisiana Farm Bureau Federation respectfully opposes the EPA proposed rule for National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers as proposed.

We request that EPA exclude agricultural processing facilities that utilize bagasse and wood fired boilers from this proposed EPA emissions rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Leon Lataille

Commenter Affiliation: Massachusetts Water Resources Authority

Document Control Number: EPA-HQ-OAR-2006-0790-1896.1

Comment Excerpt Number: 5

Comment: The proposed regulation does not exclude hot water heaters. Please clarify the status of hot water heaters regarding the proposed regulation. The exclusion for hot water heaters in the proposed 40 CFR 63 subpart DDDDD, in section 63.7491(d), would also be an appropriate exclusion for the area source regulation.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Jim Simon

Commenter Affiliation: American Sugar Cane League

Document Control Number: EPA-HQ-OAR-2006-0790-2281.1

Comment Excerpt Number: 8

Comment: (2) The Similarities Between Bagasse- Fired and Gas-Fired Boilers Are Significant.

EPA found that no POM (as 7-PAH) was emitted from industrial and commercial natural gas combustion. 63 Fed. Reg. 17847 (April 10, 1998), Table 1. EPA has exempted natural gas fueled boilers from the Proposed Rule, even though natural gas combustion is known to generate an abundance of POM when emissions from the numerous gas-fired boilers across the country are totaled. Bagasse-fired boilers, of which there are very few, have been shown not to emit POM (as 7-PAH) in any significant amount. As a result, bagasse-fired boilers should, at a minimum, receive the same regulatory treatment under this Proposed Rule as natural gas-fired boilers.

In Tables 5 and 6 below, we provide a comparison of the AP-42 7-PAH and POM emission factors for natural gas combustion (in pound/MMBtu) with the emission factors derived from the

ASCL-sponsored emission tests conducted at Louisiana mills. In both cases (bagasse and natural gas), boiler POM emissions are under 1.7% 7-PAH and over 98.3% other (non 7- PAH) POMs, primarily naphthalenes. [See submittal for Tables 5 and 6.]

The inappropriateness of EPA's decision to regulate bagasse-fired boilers while exempting gas-fired boilers is further demonstrated by the fact the bagasse-fired boilers operate fewer than 120 days each year. The contribution of HAPs from the thousands of gas-fired boilers operating year-round in Louisiana is considerably higher than from the 71 bagasse-fired boilers operating less than 120 days of the year.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: John Huber

Commenter Affiliation: National Oilheat Research Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1831.1

Comment Excerpt Number: 13

Comment: New and existing liquid fueled boilers operating in area source sites less than 3 MMBTU should be exempt from this rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Jim Simon

Commenter Affiliation: American Sugar Cane League

Document Control Number: EPA-HQ-OAR-2006-0790-2281.1

Comment Excerpt Number: 28

Comment: Bagasse-fired boilers should be removed from the list of sources subject to MACT standards under 112(d)(2).

The most logical solution to the myriad of problems with subpart JJJJJ identified above is to include an exemption for bagasse-fired area source boilers or, at a minimum, an exemption for bagasse-fired boilers that operate less than 120 days annually.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Bruce A. Steiner

Commenter Affiliation: American Coke and Coal Chemicals Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2007

Comment Excerpt Number: 1

Comment: The Proposed Rule states that any boiler listed as an affected source in another standard established under 40 CFR 63 is exempt from this rule. Because coke oven gas combustion is already regulated by another MACT rule (Subpart L at 40 CFR 63.307), as a threshold

consideration, ACCCI seeks EPA confirmation that the proposed rule does not apply to coke oven gas-fired boilers. Subpart L requires that all excess coke oven gas (which can be interpreted as that not used to underfire the coke ovens themselves, i.e., coke oven gas utilized in boilers) must be efficiently combusted. The rule requires a properly operated flare or an alternate system (approved by the Administrator) that achieves 98% destruction of the coke oven gas vented to the system. Since all boilers achieve 98% combustion efficiency when properly maintained and operated, EPA may use the Proposed Rule to impose an annual tune-up obligation as the sole requirement and approve the boiler as an alternate system under 40 CFR 63.307, which would clearly subject the coke oven gas-fired boiler to another MACT standard. This exclusion would support current efforts to encourage the energy recover of process gases to reduce fossil fuel consumption and greenhouse gas emission that would otherwise be emitted by flaring the coke oven gas and the fossil fuel used instead of coke oven gas in the boiler.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Debra J. Jezouit

Commenter Affiliation: The Class of '85 Regulatory Response Group

Document Control Number: EPA-HQ-OAR-2006-0790-1986.1

Comment Excerpt Number: 1

Comment: EPA should adopt an exemption for temporary boilers located at area sources. The proposed NESHAP for Boilers located at major sources, which amends existing Subpart DDDDD, retains the exemption for temporary boilers? EPA originally promulgated the exemption for temporary boilers because they are "used only on a limited basis and are not integrated into a facility's control system." [69 Fed. Reg. 55218, 55229.] The same is true for temporary boilers located at area sources. Temporary boilers located at area sources perform the same function as temporary boilers at major sources. Accordingly, the Group urges EPA to exempt temporary boilers located at area sources from the final rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Thomas J. Spied

Commenter Affiliation: Agrilectric Power Partners, LP

Document Control Number: EPA-HQ-OAR-2006-0790-2219.1

Comment Excerpt Number: 1

Comment: Agrilectric Power Partners built and began operating the world's first successful steam electric power generating plant that uses ground rice hulls as boiler fuel--in 1983, at our facility in Lake Charles, Louisiana. That event dramatically and positively changed the U.S. rice milling industry forever. At the time, rice hulls were a processing residue nuisance, most often dealt with by dumping and open burning. Since that time, rice hulls have turned into a valuable commodity--traded in the open market like other agricultural processing by-products such as rice bran, sugarbeet pulp, and wheat middling's.

Agrilectric is very proud of being a pioneer in green energy production, and of our role in eliminating the serious health and environmental problems created by the dumping and disposal of rice hulls. We are also very proud of the rice hull boiler ash we produce using our carefully designed and controlled boiler and operating procedures so as to contain <4% of unburned carbon—resulting in a product that is highly valued by our industrial customers in North America and Europe.

Our rice hull-fueled boiler is currently authorized by State and Federal permits to generate 12 megawatts (MW) of electricity continuously for 350 days per year. At the 12 MW production rate, we burn 13.6 tons per hour of ground rice hulls--having a fuel input heat value of 165.4 MMBTU. Emissions from our plant are strictly limited by stipulations in a Federal "Title V" operating permit, including compliance assurance monitoring, periodic stack emission testing to verify compliance, and incidental and periodic reporting of emissions. Our latest stack emissions test was performed October 29-30, 2007, which report was promptly submitted to the Louisiana Department of Environmental Quality (LDEQ). That stack emissions test included our voluntary testing for Total Hydrocarbons using EPA Method 25A, as did other similar official stack tests conducted at this plant during the twenty year period subsequent to the Clean Air Act Amendments of 1990.

At the time our plant was planned in 1982, the Lake Charles metropolitan area was in non-attainment status of the National Ambient Air Standard for photochemical oxidants (ozone). LDEQ therefore required (and have ever since), that nitrogen oxide (NOx) emissions from all new sources be kept to a minimum, so not to allow carbon monoxide (CO) emissions to soar. Agrilectric satisfied this standard in our proprietary furnace design by keeping combustion temperatures low and nearly uniform throughout the combustion zone, and minimizing combustion input air. The most recent stack test at our plant found NOx emissions to be only 0.25 lb/MMBTU of fuel input and CO emissions to be only 0.135 lb/MMBTU of fuel input, with oxygen volume percent dry of only 3.2. (The very low moisture content of rice hulls is a distinct advantage in minimizing the CO emissions the EPA rule is intending to regulate.) Total hydrocarbon emissions (including methane and ethane) observed during this test were only 0.00087 lb/MMBTU fuel input. These NOx and CO boiler performance results are comparable to what would be expected by firing natural gas with low NOx burners (see EPA publication AP-42 7/98 – Table 1.4-1). However, total hydrocarbon emissions from rice hull combustion

(0.00087 lb/MMBTU) is only 16.2% of the expected VOC (volatile organics not including the methane or ethane) emissions from combusting an equivalent fuel value amount of natural gas, according to AP-42 Table 1.4-2.

The extremely low VOC emissions from rice hull fuel combustion, and therefore extremely low organic HAP emissions, are not unexpected at Agrilectric. The combustion material in rice hulls is nearly pure cellulose, and thus nearly devoid of constituents from which VOC and semi-volatile organic compounds can be synthesized incidental to combustion. Comparatively, natural gas combustion releases VOC and semi-volatile organic compounds abundantly as evidenced by the long list of HAP emission factors for natural gas combustion in AP-42 Table 1.4-3. Carbon monoxide/oxygen concentration in the combustion zone has little or nothing to do with our HAP emissions. Carbon dioxide concentration in our "biomass" boiler is not a reliable indicator of POM emissions; and if any POM emissions are present, that is not an indication of 7-PAH emissions and certainly no basis for quantifying any 7-PAH emission reductions proclaimed in the proposed rule.

The cellulose composition of rice hulls makes the same true for metals—for which PM is the proxy. The rice hulls contain virtually no metals. At our rice hull boiler, there would be no reduction of hazardous metals emissions associated with the proposed rule's PM limitation. Our existing Title V Permit limits our PM emissions to 0.024 pounds per MMBTU whereas the proposed rule would allow 0.03. We have no desire to increase our PM emissions, which consist entirely of ash, which under our current boiler operating parameters is simply too valuable to waste.

However, tampering with our carbon monoxide ppmv and raising combustion zone oxygen levels to 7%, as called on in the proposed rule, cannot reduce our 7-PAH emissions at all. It would destroy the value of our carbon-containing ash product and increase our NO_x emissions to well above what the Title V permit allows. There are absolutely no benefits in imposing the proposed rule on rice hull boilers like the one at Agrilectric. The costs, both direct and indirect, that accompany your rule—will virtually put biomass facilities such as Agrilectric Power (and supporting industries) out of business; and send thousands more people to our country's already crowded unemployment lines. Viewed larger, the demise of Agrilectric would force rice mills in Louisiana to find a different (and more expensive) method of disposing of their methane-creating rice hulls, creating hardship for that industry vital to Louisiana and our country.

We recognize that the amount of HAP emitted from natural gas is infinitesimal. In comparison, the organic, HAP (VOC) emissions from ground rice hull combustion is less, over 84% less, than the organic HAP emissions from combusting natural gas. Also, there are a far greater number of area-source natural gas boilers emitting HAPs than there are rice hull boilers that emit less HAPs per boiler. However, EPA has excluded area source natural gas boilers from MACT regulation, because "gas-fired area source boilers are not needed to meet the 90 percent requirement of section 112(c) (3) of The Clean Air Act" Clearly, rice hull fueled boilers like Agrilectric should also be exempted.

In conclusion--Agrilectric understands that our fuel makes us somewhat unique in the biomass power industry, and we are clearly better situated to comply, or be exempted, than other biomass

producers. Our fuel has previously been dried in the rice milling process so inherent CO is far less. It is also perfectly sized for complete combustion and because of its nature and handling, has had virtually no opportunity for contamination with metals or precursors of dioxin or furan. This makes us unique with the larger biomass power community, and certainly not representative of that community; and thus reinforces our request for exemption from these regulations.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: John Lyons

Commenter Affiliation: Kentucky Division for Air Quality

Document Control Number: EPA-HQ-OAR-2006-0790-2218.1

Comment Excerpt Number: 2

Comment: 40 CFR 63 Subpart DDDDD excludes hot water heaters as applicable to Subpart DDDDD, but this exclusion and the definition for hot water heaters do not appear in Subpart JJJJJ for area sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Kathleen Tobin

Commenter Affiliation: Verizon

Document Control Number: EPA-HQ-OAR-2006-0790-2014.1

Comment Excerpt Number: 2

Comment: The proposed rule applies to oil fired units of all sizes and does not provide a minimum size exclusion. Many facilities have water heaters and small comfort heating units that based on the definition are considered "boilers". They are not used in an industrial, commercial, or institutional process but used to provide hot water for personal use or seasonal comfort heating. Units smaller than 1 MMBTU/hr were excluded from the Characterization of the U.S. Industrial/Commercial Boiler Population ES-4 Commercial Boiler Inventory because they are so small that they were effectively water heaters [Characterization of the U.S. Industrial/Commercial Boiler Population, ES-3, May 2005)]. Boilers less than 1 MMBTU/hr are generally not used for industrial or commercial processes. Verizon recommends that the EPA adopt a size exclusion for area source boilers that are less than 1 MMBTU/hr that are used as water heaters to provide hot water for personal use and seasonal comfort heating. This change will allow the EPA to meet its obligation to meet the 90 percent requirement under section 112(c)(3) of the Clean Air Act.

It should be recognized that the air quality benefits predicted by the EPA are based upon 8,760 hours of operation. Boilers used solely for seasonal heat or hot water for personal use, are controlled by a thermostat that therefore do not run constantly. Therefore, as a result of

thermostat controls and the fact that many systems will not be operated during much of the year, the benefits of including these smaller units in the rule will be far less than is currently estimated. Therefore, the associated costs and burdens are simply not justified.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Dan H. Williams

Commenter Affiliation: Sealed Air Corp

Document Control Number: EPA-HQ-OAR-2006-0790-2228.1

Comment Excerpt Number: 2

Comment: Sealed Air requests that the EPA clarify the regulation to state that electrically operated boilers are excluded. Some devices use electricity to heat water or produce steam. These are not generally thought of as enclosed combustion devices, and the definitions of boiler and process heater should exclude devices using electricity to heat water or produce steam.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Kathleen Tobin

Commenter Affiliation: Verizon

Document Control Number: EPA-HQ-OAR-2006-0790-2014.1

Comment Excerpt Number: 3

Comment: EPA noted that new facilities have the flexibility to include compliance costs into design and planning as well as the option of fuel selection to minimize their compliance costs[75 FR 31909 (June 4, 2010)]. However, all types of fuel may not be readily available at all locations throughout the country. For a natural gas conversion, the facility may need to complete significant building and utility modifications or possibly extend gas service mains to supply natural gas to a boiler. Furthermore, the annual cost for compliance stack emission testing is estimated to be \$14,000 per year [Regulatory Impact Analysis: National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, D-I I, (April 2010).], which could well exceed the cost of a small boiler. As noted above there is no minimum size exclusion for area source boilers. Verizon is requesting for new small boilers between 1MMBTU/hr and 10 MMBTU/hr, that the EPA adopt a work practice standard such as a biennial tune up, to minimize CO emissions. As noted above, the benefits to be gained through this regulation for smaller units are currently greatly overestimated by the EPA because of the assumed usage assumption. The actual benefit does not justify the increased costs that would be imposed by the rule as proposed for these smaller units. In addition, Verizon recommends that the EPA consider a size exclusion for less than 1 MMBTU/hr new area source boilers if they are used to provide hot water for personal use and seasonal comfort heating.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Martin T. Booher

Commenter Affiliation: Ethan Allen Interiors, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1974.1

Comment Excerpt Number: 3

Comment: EPA should adopt a risk-based standard for HAPs that balances the economic/energy impacts to rural and urban communities and that area sources could meet in lieu of meeting the MACT emission limits (or even GACT standards) in the proposed rule. For instance, EPA could adopt a risk-based exemption for boilers in rural areas and other locations whose emissions will not contribute to organic and metallic hazardous air pollutant levels in populated areas.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Scott Davis

Commenter Affiliation: Arizona Public Service Company

Document Control Number: EPA-HQ-OAR-2006-0790-2233.1

Comment Excerpt Number: 3

Comment: APS operates the Palo Verde Nuclear Generating Station (Palo Verde), located about 55 miles west of Phoenix. Palo Verde has three generating units that produce nearly 4,000 megawatts of electricity making it the largest generator of electricity in the U.S. Palo Verde also has located on site a diesel fired auxiliary boiler with a heat capacity greater than 10 MMBtu/hr. The purpose of this boiler is to provide supplemental steam to the facility in the extremely unlikely event that all three units are offline at the same time. Generally, when one unit is offline for maintenance and refueling, the other two units are in operation. Secondary steam lines are cross-connected between each nuclear unit which allows for a reliable source of steam even if one unit is not operating. Consequently, the auxiliary boiler does not operate except under the rare situation when the three units are not operating. This has not operated over the past 5 years. However, the auxiliary boiler must be ready to operate if needed.

Based on the proposed Industrial, Commercial, and Institutional Boiler NEHAP for area sources the Palo Verde auxiliary boiler would be required to meet a carbon monoxide (CO) standard of 2 parts per million (ppmvd) on a daily basis, install a continuous emissions monitoring system (CEMS) for CO, and perform an energy assessment. This would force Palo Verde to perform an engineering design change study in accordance with 10 CFR 50.59 to determine impacts to design safety at the facility. Palo Verde would also be required to include document drawing modifications, pilot testing, and operational awareness training, in addition to installing CO

CEMS and subsequent emission control equipment. Thus, Palo Verde will be required to expend a tremendous amount of resources to comply with standards for an auxiliary boiler that rarely operates, and which will produce negligible environmental benefit.

It is APS' position that the proposed requirements are too stringent for the types of boilers located at a nuclear power plants. Therefore, APS requests that all oil-fired boilers at nuclear power plants be exempt from this rulemaking.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Douglas I. Greenhaus

Commenter Affiliation: National Automobile Dealers Association

Document Control Number: EPA-HQ-OAR-2006-0790-2047.1

Comment Excerpt Number: 3

Comment: To the extent dealerships operate used motor oil fired units to heat water, they should be excluded. Heat recovery units allowed for and regulated by the RCRA program should not be subject to prohibitive rules issued pursuant to the Clean Air Act, especially where EPA has no justifiable basis upon which to reverse its prior determination that space heaters/boilers covered by 40 CFR 279.23 do not present a significant threat to human health and the environment. Certainly, EPA cannot show that it must cover small used oil-fired boilers under its area source NESHAP in order to meet the Clean Air Act Section 112(c)(3) mandate that 90 percent of the emissions of 30 urban HAPs be regulated.

Indeed, it does not appear that EPA intends to regulate these units under the area source NESHAP. For example, nowhere does EPA indicate how its proposed testing, monitoring, tune-up and/or emission control requirements might apply to units governed by Section 279.23. In fact, any such mandates would be prohibitive, especially for the many small businesses that operate such units.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Douglas I. Greenhaus

Commenter Affiliation: National Automobile Dealers Association

Document Control Number: EPA-HQ-OAR-2006-0790-2047.1

Comment Excerpt Number: 4

Comment: EPA's NESHAP area source rule should impose no new requirements on the on-site recycling of used motor oils in space heaters and should specifically exempt them.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Barry Christensen

Commenter Affiliation: Occidental Chemical Corp

Document Control Number: EPA-HQ-OAR-2006-0790-2227.1

Comment Excerpt Number: 6

Comment: OCC respectfully requests an exemption for water heaters and temporary boilers. No clear exemption exists for smaller water heaters that are similar in size to domestic water heaters. In addition, our sites sometimes must use temporary boilers in the event of an unexpected boiler failure when lead time is needed to obtain a permanent replacement unit. OCC supports inclusion of an exemption for these temporary units, which are used only after approval by the appropriate air permitting agency.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Marilyn Crockett

Commenter Affiliation: Alaska Oil and Gas Association

Document Control Number: EPA-HQ-OAR-2006-0790-2212.1

Comment Excerpt Number: 6

Comment: Section 63.7491(j) of the proposed major source rule excludes temporary boilers. Temporary boiler is defined in 63.7575 as “any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another. A temporary boiler that remains at a location for more than 180 consecutive days is no longer considered to be a temporary boiler. Any temporary boiler that replaces a temporary boiler at a location and is intended to perform the same or similar function will be included in calculating the consecutive time period.” AOGA believes this exemption is appropriate for both the proposed major source and area source rules. Area sources are even more likely to use such temporary boilers than are major sources, since area sources are less likely to have adequate backup boiler capacity to handle all contingencies than are major sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Michael Hutcheson

Commenter Affiliation: Ameren Corp.

Document Control Number: EPA-HQ-OAR-2006-0790-2012.1

Comment Excerpt Number: 7

Comment: Ameren believes that US EPA should consider exempting all boilers used under limited use condition from the MACT and work practice standards. The limited use subcategory should define limited use operation of auxiliary or limited use boilers as 20 % of full capacity on a three-year average. Limited use boilers do not have the capacity factors to warrant MACT controls for POM, Hg or metallic HAPs. US EPA should conduct a separate economic impact analyses for small and limited use sources to determine if it is actually cost effective to regulate these sources as it does for larger units.

In addition, in the case of limited use boilers, it is not practicable economically to require sources which operate infrequently to undergo the expensive measurement methodologies at non-detectable levels. Ameren's limited use/auxiliary boilers typically operate only during outages at the electrical generating units. Because limited use boilers operate less than 10 or 20 % of the time, continuous emissions monitoring of these sources is onerous and not cost effective.

Furthermore, conducting stack testing during the infrequent outages during which an auxiliary boiler may run and which may last only very short periods at some plants is nearly impossible. Stack testing during significant EGU outages is not feasible due to the large numbers of contractors and maintenance personnel engaged in activities associated with returning electrical generating units back into service. In addition, our nuclear generating station which also includes a limited use auxiliary boiler, would only be able to test during the short 8 to 10 week period for outages which generally occur more than 12 months apart and which result in extra personnel and extra security measures due to the nature of nuclear power plant operation. US EPA should consider the special case of limited use boilers at nuclear generating stations for exemption from CO CEMS and stack testing requirements of the MACT.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Marilyn Crockett

Commenter Affiliation: Alaska Oil and Gas Association

Document Control Number: EPA-HQ-OAR-2006-0790-2212.1

Comment Excerpt Number: 7

Comment: AOGA also suggests that the EPA replace the exclusion for "temporary boilers" with an exclusion for "portable boilers." All temporary boilers are portable boilers, and almost all portable boilers are relatively small (i.e., less than 10 MMBtu/hr). As written, the definition of temporary boiler implicitly includes portable boilers but only for units that do not remain at a location for more than 180 consecutive days. This applicability criteria is arbitrary and overly narrow, and in conjunction with the lack of any de minimis size threshold, will often require very small temporary/portable units to meet numerical standards. In the rule preamble EPA noted the inapplicability of the reference test methods to small boilers, and also the excessive costs associated with annual testing and monitoring requirements for both new and existing units.

Because portable boilers are small by design, a broader exemption for all portable boilers would be consistent with these stated concerns.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Cynthia A. Finley

Commenter Affiliation: National Association of Clean Water Agencies

Document Control Number: EPA-HQ-OAR-2006-0790-2260.1

Comment Excerpt Number: 7

Comment: The proposed rule does not contain any exemptions for emergency situations. Wastewater utilities must maintain their sewage treatment capacity at all times to meet their obligations under the Clean Water Act, and utilities may need to use more oil than usual during gas disruptions or make other operational adjustments to keep the treatment facility functioning. The NESHAP should therefore include an emergency exemption for wastewater treatment facilities to allow for temporary, emergency exceedance of emissions limits without violation.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Marilyn Crockett

Commenter Affiliation: Alaska Oil and Gas Association

Document Control Number: EPA-HQ-OAR-2006-0790-2212.1

Comment Excerpt Number: 8

Comment: AOGA would stress to EPA that temporary/portable boilers are predominately contractor owned, making compliance with the standards and associated monitoring, recordkeeping and reporting (MR&R) requirements of the rule very difficult for the operator of the stationary source. Because EPA has not included a de minimis threshold for the applicability of work practice standards, small boilers that have not historically been included in stationary source Title V operating permits because such units are classified as insignificant under the Title V rules will now be subject to Subpart JJJJJ and must be included in permits because Title V rules do not allow otherwise insignificant units subject to NSPS/MACT standards to be classified as insignificant. Again, these small boilers are predominately contractor owned units only temporarily located at the source. Inclusion of contractor owned units in operating permits is very problematic because the MR&R timelines required by the rule do not contemplate the possibility that the affected source is temporary. Operating permits are not an appropriate way to address Subpart JJJJJ compliance for small temporary/portable boilers that are not permanently located at the stationary source. An exemption for such units would largely eliminate our concerns.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Cynthia A. Finley

Commenter Affiliation: National Association of Clean Water Agencies

Document Control Number: EPA-HQ-OAR-2006-0790-2260.1

Comment Excerpt Number: 8

Comment: The proposed rule does not exclude hot water heaters. EPA should clarify the status of hot water heaters regarding the proposed regulation. The exclusion for hot water heaters in the proposed 40 CFR 63 subpart DDDDD, section 63.7491(d), would also be an appropriate exclusion for the area source regulation.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Robert G. Hedden

Commenter Affiliation: Oilheat Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-2249

Comment Excerpt Number: 12

Comment: Biodiesel should be exempt from both the major source and area source rules.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: John Hopewell

Commenter Affiliation: American Coatings Association

Document Control Number: EPA-HQ-OAR-2006-0790-2062.1

Comment Excerpt Number: 14

Comment: In the companion proposal for Major Source NESHAP, EPA discusses how “hot water heaters” could be considered to meet the definition of “boiler” and could be located at an Industrial, Commercial, or Institutional site. However, EPA draws a distinction with these units and specifically exempts them from the Major Source NESHAP.

The proposed rule would not regulate hot water heaters, as defined in this proposed rule, because such units are not part of the listed source categories. Many industrial facilities have office buildings located onsite which use hot water heaters. Such hot water heaters, by their design and operation, could be considered boilers since hot water heaters meet the definition of a boiler as

specified in the proposed rule, because they are enclosed devices that combust fuel for the purpose of recovery energy to heat water. However, hot water heaters are more appropriately described as residential -type boilers, not industrial, commercial, or institutional boilers because their output (i.e., hot water) is intended for personal use rather than for use in an industrial, commercial, or institutional process. Moreover, since hot water heaters generally are small and use natural gas as fuel, their emissions are negligible compared to the emissions from the industrial operations that make such facilities major sources, and compared to boilers that are used for industrial, commercial, or institutional purposes. However, the primary reason that we are excluding hot water heaters is that hot water heaters are not part of the listed source category. Consequently, we are including a definition of hot water heaters that includes fuel, size, pressure and temperature limitations that we believe are appropriate to distinguish between residential -type units and industrial, commercial, or institutional units.

The same is true for the Area Source NESHAP and EPA should adopt an analogous exemption in §63.11195(f): A hot water heater as defined in this subpart. The same definition should be adopted in §63.11236: Hot water heater means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous or liquid fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210 F (99 C).

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Kevin M. Dempsey

Commenter Affiliation: American Iron and Steel Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2061

Comment Excerpt Number: 18

Comment: Coke Oven Gas-Fired Boilers Should be Excluded from the Requirements of the Rule Because They are Regulated by Another MACT Rule

The proposed rule states that any boiler listed as an affected source in another standard established under 40 CFR 63 is exempt from this rule. Because coke oven gas combustion is already regulated by another MACT rule (Subpart L at 40 CFR 63.307), as a threshold consideration, AISI seeks EPA confirmation that the proposed rule does not apply to coke oven gas-fired boilers. Subpart L requires that all excess coke oven gas (which can be interpreted as that not used to underfire the coke ovens themselves, i.e., coke oven gas utilized in boilers) must be efficiently combusted. The rule requires a properly operated flare or an alternate system (approved by the Administrator) that achieves 98% destruction of the coke oven gas vented to the system. Since all boilers achieve 98% combustion efficiency when properly maintained and operated, EPA may use the proposed area source boiler rule to impose an annual tune-up obligation as the sole requirement and approve the boiler as an alternate system under 40 CFR

63.307, which would clearly subject the coke oven gas-fired boiler to another MACT standard. This exclusion would support current efforts to encourage the energy recover of process gases to reduce fossil fuel consumption and greenhouse gas emission that would otherwise be emitted by flaring the coke oven gas and the fossil fuel used instead of coke oven gas in the boiler.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Bruce A. Steiner

Commenter Affiliation: American Coke and Coal Chemicals Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2007

Comment Excerpt Number: 32

Comment: In section IV.A of the preamble to the Proposed Rule, EPA states that the proposal would not regulate hot water heaters as defined in §63.7575. EPA recognizes that all hot water heaters meet the proposed definition of a boiler because they are enclosed devices that combust fuel for the purpose of heating water, but it is further stated that the when the hot water output from a hot water heater is intended for personal use rather than for use in an industrial, commercial, or institutional process, the hot water heater is more appropriately identified as a residential-type boiler and not an industrial, commercial, or institutional boiler.

EPA seeks to establish a definition for hot water heaters that would distinguish residential-type units or those used for non-process purposes from process-related units. However, the proposed definition bases the exemption solely on the size and output of the unit by limiting the capacity of an exempted hot water heater to 120 gallons, the pressure to 160 psig, and the temperature to 120 °F.

In order to maintain consistency with the rationale used to exempt hot water heaters, a hot water heater should be distinguished from a boiler by the intended use of its output, not its physical parameters. Accordingly, AISI recommends the following revision to the definition in §63.7575: Hot water heater means a device in which water is heated by combustion of gaseous or liquid fuel and is withdrawn for personal use and not for use in an industrial, commercial, or institutional process.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Jim Griffin

Commenter Affiliation: American Chemistry Council

Document Control Number: EPA-HQ-OAR-2006-0790-1925.1

Comment Excerpt Number: 44

Comment: EPA Should Exempt Temporary Boilers. The proposed rule does not include an exemption for temporary boilers. ACC believes the rule should include such an exemption, as the

proposed Boiler MACT rule does. Chemical operations periodically use portable/transportable boilers to supply/supplement other site steam supplies. These boilers, which are typically rented and used on a temporary basis, are portable shop-fabricated package design units. They are typically used when there is a mechanical problem that takes a boiler out of service for a period of time to complete repairs or to maintain steam balances during planned unit turnarounds. Because they are used on a limited time basis, portable units are typically not fully integrated with site control systems.

Most portable/transportable boilers are owned by a rental company, not the stationary source. Rental boilers may or may not be operated by the facility owner/operator. These temporary boilers will typically only fire gas or liquid fossil fuels (natural gas or distillate oil) which may be cleaner than the boiler(s) they are temporarily replacing.

Since portable/transportable boilers are required to be used, for a temporary time period, on either an emergency basis or to cover planned unit maintenance downtimes, it is not practical to comply with all of the MACT rule requirements that are more suitable for permanent fixed units. Therefore, we recommend that EPA include an exclusion for temporary boilers in this area source rule similar to the exclusion proposed in the Boiler MACT rule (exclude temporary boilers from the regulation as long as they are onsite for no more than 180 consecutive days).

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Commenter Name: Jim Griffin

Commenter Affiliation: American Chemistry Council

Document Control Number: EPA-HQ-OAR-2006-0790-1925.1

Comment Excerpt Number: 46

Comment: EPA Should Add An Exemption For Water Heaters. Hot water heaters are exempt from the proposed Boiler MACT rule and also should be exempted from the area source rule. The preamble to the proposed Boiler MACT rule provides the following rationale for exempting hot water heaters: [75 Fed. Reg. 32016]

“The proposed rule would not regulate hot water heaters, as defined in this proposed rule, because such units are not part of the listed source categories. Many industrial facilities have office buildings located onsite which use hot water heaters. Such hot water heaters, by their design and operation, could be considered boilers since hot water heaters meet the definition of a boiler as specified in the proposed rule, because they are enclosed devices that combust fuel for the purpose of recovery energy to heat water. However, hot water heaters are more appropriately described as residential-type boilers, not industrial, commercial, or institutional boilers because their output (i.e., hot water) is intended for personal use rather than for use in an industrial, commercial, or institutional process. Moreover, since hot water heaters generally are small and use natural gas as fuel, their emissions are negligible compared to the emissions from the industrial operations that make such facilities major sources, and compared to boilers that are

used for industrial, commercial, or institutional purposes. However, the primary reason that we are excluding hot water heaters is that hot water heaters are not part of the listed source category.”

The ASME Code, Section IV- Rules for Construction of Heating Boilers, is applicable to hot water heating boilers and is, in our opinion, the standard that should be used to define a hot water heater consistent with industry standards. The ASME Code, Section IV is applicable to: “(a) steam boilers for operation at pressures not exceeding 15 psi; (b) hot water heating boilers and hot water supply boilers for operating at pressures not exceeding 160 psi and/or temperatures not exceeding 250°F, at or near the boiler outlet.”

We recommend EPA specifically exempt hot water heaters from the area source rule and add a definition of hot water heater to read as follows:

Hot water heater means a closed vessel in which water is heated by combustion of gaseous or liquid fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 pounds per square inch gauge (psig), including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 250°F (121°C) at or near the heater outlet.

Response: See response to comment EPA-HQ-OAR-2006-0790-0396, excerpt 18 for discussion of exemptions.

Legal/Applicability: Excluding Gas Units

Commenter Name: David Meierhenry

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-0414.1

Comment Excerpt Number: 1

Comment: I support the EPA’s finding that regulation of gas-fired area source boilers is not necessary, as stated in section III of the preamble and 63.11195(e).

Response: EPA notes that certain comments directed towards the major source MACT requirements for gas-fired boilers were directed to this docket. These comments are not germane to any issue in this rulemaking. In particular, comments addressing the comparing the treatment of coal fired units and gas fired units in the major source do not address the basis for the exclusion of gas fired units from the area source rule. Whether the assertions by the commenter are true or false has no affect on determining whether the regulatory approach of this rule is valid. Additional support for EPA’s conclusion that gas-fired area source boilers do not need to be regulated to achieve the 90 percent thresholds of CAA sections 112(c)(3) and 112(c)(6) was received from several comments. We have maintained our exclusion of gas units in the final rule.

Biogas is explicitly included in the definition of gas. Liquid-fired units are subject to GACT and not the proposed CO limits. Monitoring requirements have been adjusted to reflect this rule change. Waste heat boiler is excluded from the definition of boiler.

Commenter Name: Eric Hiser

Commenter Affiliation: Nucor Corporation

Document Control Number: EPA-HQ-OAR-2006-0790-0839.1

Comment Excerpt Number: 1

Comment: Nucor supports EPA's decision to exclude gas-fired boilers from the regulated source category.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: William C. Herz

Commenter Affiliation: The Fertilizer Institute

Document Control Number: EPA-HQ-OAR-2006-0790-1051.1

Comment Excerpt Number: 1

Comment: For the reasons set forth in the Area Source Boiler rule preamble, TFI agrees with EPA's conclusion that gas-fired area source boilers should not be subject to the 90 percent requirement of CAA § 112(c)(3). The Agency's findings that natural gas-fired boilers and process heaters do not emit the urban HAPs identified in the Area Source Boiler rule are consistent with documented emission characterizations of these boilers, such as AP-42, Vol. I, CH1.4: Natural Gas Combustion [U.S. EPA. Compilation of Air Pollutant Emissions Factors. Volume 1: Stationary Point and Area Sources. AP-42 Fifth Edition. January 1995]. Therefore, it is not reasonable or cost-effective to subject natural gas-fired area boilers to proposed emission limits for particulate matter, mercury and carbon monoxide. TFI requests that the Agency maintain the exemption for natural gas-fired area source boilers in the final rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Michael J. Hagenbarth

Commenter Affiliation: RockTenn

Document Control Number: EPA-HQ-OAR-2006-0790-1473.1

Comment Excerpt Number: 12

Comment: EPA is authorized to regulate area sources under § 112 in only two circumstances. First, § 112(c)(3) provides that EPA "shall list" area source categories "which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section." Second, § 112(c)(6) authorizes EPA to "list categories and subcategories of sources" — including area sources — as necessary to meet the specified aggregate control requirement for the seven listed HAPs.

Gas-fired industrial boilers are clean burning and low emitting. There is no evidence in the rulemaking record (and no evidence generally) suggesting that HAP emissions from gas-fired area source industrial boilers present any "threat of adverse effects to human health or the environment," much less any threat that would "warrant regulation" under § 112. Moreover, the Agency has concluded that there is no need to regulate gas-fired area source industrial boilers to meet the requirements of § 112(c)(6). Therefore, there is no basis for regulating gas-fired industrial boilers under the Area Source Rule.

Additionally, in the proposed MACT rule for major source industrial boilers, EPA proposes that work practice standards are appropriate and justified for units in the Gas 1 subcategory out of concern for the cost of complying with numeric emissions limitations and based on the adverse policy incentives that would be created. 75 Fed. Reg. at 32025. This rationale applies equally when considering the need to regulate gas-fired units under the Area Source Rule and lends additional support to EPA's proposal not to regulate these units.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Lisa Beal

Commenter Affiliation: Interstate Natural Gas Association of America

Document Control Number: EPA-HQ-OAR-2006-0790-1919.1

Comment Excerpt Number: 1

Comment: The area source rule excludes natural gas-fired equipment and INGAA supports this decision.

In the preamble to the area source rule, EPA clarifies that natural gas-fired boilers and process heaters are not subject to the area source regulation. The preamble indicates that regulation of area source boilers is required to meet emission reduction obligations for certain hazardous air pollutants (HAPs) under Clean Air Act (CAA) §112(c)(3), but that natural gas-fired boilers are not included in this regulatory requirement:

"Natural gas-fired area source boilers do not emit any of the urban HAP identified above. Therefore, regulation of gas-fired area source boilers is not necessary to meet the 90 percent requirement under section 112(c)(3) for these HAP." [75 FR 31900]

INGAA supports this position and agrees that area source boilers and process heaters should be excluded from the area source rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Michael Bradley

Commenter Affiliation: The Clean Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-1689.1

Comment Excerpt Number: 1

Comment: The Clean Energy Group supports EPA’s treatment of natural gas-fired units in the proposed rule. With substantially fewer emissions of HAPs, criteria pollutants, and greenhouse gases, natural gas offers a reliable, currently-available fuel option that should be encouraged.

The Clean Energy Group requests that EPA clarify that all gaseous fuel-fired boilers, not just natural gas-fired units, are excluded from the area source NESHAP. While the regulatory text is clear [Footnote: from proposed 63.11237: “Gaseous fuels includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, and biogas], fact sheets and parts of the preamble refer to “natural gas”, leaving the impression that other gas-fired units may be regulated.

Additionally, recent discussions with boiler vendors indicate that commercial guarantees are unavailable for the very low concentrations of carbon monoxide (CO) discussed in this rule. [Footnote: For example, Cleaver Brooks states that they typically guarantee only 50 ppm CO for low-emission boilers.] In considering fuel-switching or purchase of a new boiler, a numeric MACT standard below that which a vendor will guarantee would serve as a substantial disincentive to natural gas use.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Robert H. Colby and G. Vinson Hellwig

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2022.1

Comment Excerpt Number: 22

Comment: EPA has proposed to exempt natural gas-fired units from all emission limits related to HAPs in favor of a work practice standard – an annual “tune up” that would reduce HAP emissions by a small and unquantified amount by encouraging sources to improve the fuel efficiency of their units. [Footnote: EPA observes that 80 percent of the small boilers surveyed already conduct annual tune-ups to improve fuel efficiency. We note that EPA’s proposed work practice only requires an evaluation of options to improve fuel efficiency and no obligation to actually do so.] EPA asserts that enforcing a MACT standard for these units would double the

cost of the Boiler MACT rule by, among other things, mandating expensive fabric filters and acid gas scrubbers at natural gas-fired units. However, since there is no cost exemption from MACT floor requirements, EPA also asserts that it would be infeasible to enforce emission limitations on this group of sources because monitoring costs for some sources would be too expensive, especially units with stack diameters less than 12 inches. In support of its argument EPA points out that the “conventional” configuration of Method 5 testing equipment would block a significant portion of a 12-inch diameter stack.

Given the low concentrations of PM and mercury found in the exhaust gases of natural gas-fired units, NACAA agrees with the notion that natural gas-fired units should not be required to install fabric filters or acid gas scrubbers to control those pollutants. However, there is no reason why they should have to if EPA undertakes to establish emission limits based on the MACT floor calculation process. The “best performing” natural gas fired units do not have these controls and so the average emission level of the “best performing” 12 percent, combined with an appropriate variability factor, should be sufficient to address PM, mercury and HCl limits without use of these controls. [Footnote: We also note that the definition of MACT technology includes the use of cleaner fuels. While we agree with EPA that this should not go so far as to require the use of natural gas in lieu of coal or other fuels, it may include such responses as chlorine limits on fuels to control emissions of HCl, dioxins and furans.]

EPA overreaches when, without any discussion or analysis, it attempts to exempt natural gas-fired boilers from CO limits, as a surrogate for organic HAPs. [Footnote: Both NACAA and CIBO (the Council of Industrial Boiler Operators) encouraged EPA to conduct testing to further evaluate the correlation between CO emissions and emissions of organic HAPs, but EPA declined to do so.] In doing so the agency again puts at risk a common-sense solution for those pollutants that it makes sense to exclude and undermines its credibility on other issues. EPA also undercuts its rationale for establishing MACT floors for other units, such as oil-fired boilers, with stacks less than 12 inches. Why, some will undoubtedly ask, is it feasible to measure PM, dioxin/furan and mercury emissions at oil-fired ICI Boilers and medical waste incinerators and not at gas-fired units? Does EPA believe that it can expand the notion of work practice standards instead of emission limits to any subcategory where some sources might have to install temporary scaffolding to conduct a test?

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Robert H. Colby and G. Vinson Hellwig

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2022.1

Comment Excerpt Number: 23

Comment: EPA points to the “conventional” configuration of the Method 5 testing equipment. However, Method 5 is a PM measurement procedure, not a CO measurement process, and sources with smaller stacks are able to work around this issue and measure PM. There is nothing

in the rulemaking record that we are aware of that shows that it is infeasible to measure CO in natural gas-fired boilers. Federal, state and local authorities have routinely required these measurements for years, since CO is a criteria pollutant under the CAA. Further, the rulemaking record is replete with CO measurements from units of all sizes. In fact, there are more measurements of CO at natural gas-fired units (of all sizes) in the rulemaking record than any other pollutant/fuel combination.

NACAA's data base encompassed CO measurements of 161 gas-fired boilers. This universe included a number of what we would call "gross emitters" that will likely require measures beyond what would be included in a tune up, such as new burners and/or modification of the air supply system, to substantially reduce CO levels. For these units, in particular, the notion of a "voluntary" tune up work practice standard is not an adequate substitute for a MACT standard as required by the CAA. Under section 112(h), a design, equipment, work practice or operational standard is authorized if it is not practicable to prescribe or enforce an emission limitation. However, that section requires that such work practice requirements must be consistent with the MACT and MACT floor provisions of section 112(d) and must contain such requirements as will assure the proper operation and design of those elements. In other words, there must be a reason to believe that the alternate standard will achieve a level of emission reduction that is consistent with MACT floor requirements (at a minimum). Such standards must also be consistent with the obligation to require the use of maximum achievable control technology even if measuring the in-use performance of that technology is infeasible. This could be accomplished, for example, by requiring the use of certain types of low-CO burners that have been tested by manufacturers to meet minimum efficiency requirements. Even if the "tune up" required mandatory improvements rather than merely encouraging such improvements, EPA's proposed work practice requirement would not achieve emission reductions that are consistent with the definition of MACT.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners, CIBO

Document Control Number: EPA-HQ-OAR-2006-0790-1783.1

Comment Excerpt Number: 68

Comment: In the Proposed Rule, EPA states that gas-fired area source boilers is not necessary. 75 FR 31900. EPA defines "gas-fired boiler" to include

any boiler that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

75 FR 31931. CIBO agrees that gas-fired boilers burning liquid fuel only during periods of gas curtailment are in fact gas-fired boilers and not covered under the Proposed Rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 1

Comment: EPA is authorized to regulate area sources under § 112 in only two circumstances. First, § 112(c)(3) provides that EPA “shall list” area source categories “which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section.” Second, § 112(c)(6) authorizes EPA to “list categories and subcategories of sources” – including area sources – as necessary to meet the specified aggregate control requirement for the seven listed HAPs.

Gas-fired industrial boilers are clean burning and low emitting. There is no evidence in the rulemaking record (and no evidence generally) suggesting that HAP emissions from gas-fired area source industrial boilers present any “threat of adverse effects to human health or the environment,” much less any threat that would “warrant regulation” under § 112. Moreover, the Agency has concluded that there is no need to regulate gas-fired area source industrial boilers to meet the requirements of § 112(c)(6). Therefore, there is no basis for regulating gas-fired industrial boilers under the Area Source Rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Britt S. Fleming

Commenter Affiliation: Auto Goup

Document Control Number: EPA-HQ-OAR-2006-0790-1916.1

Comment Excerpt Number: 1

Comment: While the Auto Group is not submitting separate comments on the area source proposal, participating companies fully support EPA’s treatment of gaseous fuels in the proposed area source rule. Specifically, the Auto Group endorses EPA’s decision to exclude natural gas-fired area source boilers in the proposed area source rule given that these units do not emit any mercury, arsenic, beryllium, cadmium, lead, chromium, manganese, nickel, POM (as 7- PAH), ethylene dioxide, and PCB.[See National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers, 75 Fed. Reg. at 31,900 (proposed June 4, 2010).]

Furthermore, EPA's decision that "regulation of gas-fired area source boilers is not necessary to meet the 90 percent requirement under section 112(c)(3) for these [urban] HAP" is appropriate in light of the very low-HAP emissions from natural gas-fired units.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 2

Comment: In the proposed MACT rule for major source industrial boilers, EPA proposes that management or work practice standards are appropriate and justified for units in the Gas 1 subcategory out of concern for the cost of complying with numeric emissions limitations and based on the adverse policy incentives that would be created. 75 Fed. Reg. at 32025. This rationale applies equally when considering the need to regulate gas-fired units under the Area Source Rule and lends additional support to EPA's proposal not to regulate these units.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Stephen E. Woock

Commenter Affiliation: Weyerhaeuser Company

Document Control Number: EPA-HQ-OAR-2006-0790-1984.1

Comment Excerpt Number: 8

Comment: EPA has assessed emissions from and the cost of controls for gas boilers, and proposed to exclude gas-fired boilers from the area source boiler category. Weyerhaeuser agrees with this assessment and supports EPA's decision.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Jeffery S. Hannapel

Commenter Affiliation: National Association for Surface Finishing

Document Control Number: EPA-HQ-OAR-2006-0790-1840.1

Comment Excerpt Number: 10

Comment: EPA is authorized to regulate area sources if the area source category presents a threat of adverse effects to human health or the environment or if it is necessary to meet the specified aggregate control requirement for the seven listed HAPs. Gas-fired boilers are clean burning and low emitting. There is no evidence to suggest that HAP emissions from gas-fired area source industrial boilers present any “threat of adverse effects to human health or the environment,” and need to regulate gas-fired area source industrial boilers to meet the applicable control requirements. There is, therefore, no basis for regulating gas-fired industrial boilers pursuant to the Boiler GACT.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Jeffery S. Hannapel

Commenter Affiliation: National Association for Surface Finishing

Document Control Number: EPA-HQ-OAR-2006-0790-1840.1

Comment Excerpt Number: 11

Comment: Additionally, in the proposed MACT rule for major source industrial boilers, EPA proposes that work practice standards are appropriate and justified for units in the Gas 1 subcategory based on the relatively high cost of complying with numeric emissions limitations and the adverse policy incentives that would be created. 75 Fed. Reg. at 32025. This rationale applies equally when considering the need to regulate gas-fired units under the Boiler GACT and lends additional support to EPA’s proposal not to regulate these units.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Bill Perdue

Commenter Affiliation: American Home Furnishings Alliance, AHFA

Document Control Number: EPA-HQ-OAR-2006-0790-1970.1

Comment Excerpt Number: 14

Comment: EPA is authorized to regulate area sources under §112 in only two circumstances. First, §112(c)(3) provides that EPA “shall list” area source categories “which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section.” Second, §112(c)(6) authorizes EPA to “list categories and subcategories of sources” – including area sources – as necessary to meet the specified aggregate control requirement for the seven listed HAPs.

Gas-fired industrial boilers are clean burning and low emitting. There is no evidence suggesting that HAP emissions from gas-fired area source industrial boilers present any “threat of adverse effects to human health or the environment,” much less any threat that would “warrant

regulation” under §112. Moreover, the Agency has concluded that there is no need to regulate gas-fired area source industrial boilers to meet the requirements of § 112(c)(6). Therefore, there is no basis for regulating gas-fired industrial boilers under the Area Source Rule, and we support EPA’s proposal not to regulate gas-fired industrial boilers.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Matthew Todd and David Friedman

Commenter Affiliation: American Petroleum Institute (API) and National Petrochemical and Refiners Association (NPRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2025.1

Comment Excerpt Number: 15

Comment: EPA is correct in excluding gas-fired boilers from this proposal. EPA’s original analyses underlying the §112(c)(6) source category listings shows that gas combustion is not a significant contributor to the presence of the (c)(6) HAPs in urban areas. Thus, gas combustion was rightfully not listed as a (c)(6) category and EPA therefore is correct in not addressing gas combustion in this proposal.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Traylor Champion

Commenter Affiliation: Georgia-Pacific

Document Control Number: EPA-HQ-OAR-2006-0790-1937.1

Comment Excerpt Number: 1

Comment: GP supports EPA’s proposal not to regulate gas-fired industrial boilers under the Area Source Rule.

EPA is authorized to regulate area sources under §112 in only two circumstances. First, §112(c)(3) provides that EPA “shall list” area source categories “which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section.” Second, §112(c)(6) authorizes EPA to “list categories and subcategories of sources” – including area sources – as necessary to meet the specified aggregate control requirement for the seven listed HAPs.

Gas-fired industrial boilers are clean burning and low emitting. There is no evidence in the rulemaking record (and no evidence generally) suggesting that HAP emissions from gas-fired area source industrial boilers present any “threat of adverse effects to human health or the environment,” much less any threat that would “warrant regulation” under §112. Moreover, the

Agency has concluded that there is no need to regulate gas-fired area source industrial boilers to meet the requirements of § 112(c)(6). Therefore, there is no basis for regulating gas-fired industrial boilers under the Area Source Rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Mary Graham

Commenter Affiliation: Charles Metro Chamber of Commerce

Document Control Number: EPA-HQ-OAR-2006-0790-1953.1

Comment Excerpt Number: 1

Comment: The Chamber supports a number of elements of EPA's proposal, particularly its conclusions not to regulate gas-fired units.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Dirk J. Krouskop

Commenter Affiliation: MeadWestvaco

Document Control Number: EPA-HQ-OAR-2006-0790-1946.1

Comment Excerpt Number: 2

Comment: MWV does support EPA for its decision to not regulate gas-fired boilers. Gas-fired boilers are clean burning and low emitting and we are pleased that the Agency concluded that there is no need to regulate these units to meet the requirements of § 112(c)(6). In fact, we agree with the approach advocated by AF&PA that EPA has adequate justification to establish work practice standards for not only gas fired units, but for all affected units that would be subject to an Area Source MACT standard.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Traylor Champion

Commenter Affiliation: Georgia-Pacific

Document Control Number: EPA-HQ-OAR-2006-0790-1937.1

Comment Excerpt Number: 2

Comment: Additionally, in the proposed MACT rule for major source industrial boilers, EPA proposes that work practice standards are appropriate and justified for units in the Gas 1

subcategory because of the cost of complying with numeric emissions limitations and based on the adverse policy incentives that would be created (see 75 Fed. Reg. 32025). This rationale applies equally when considering the need to regulate gas-fired units under the Area Source Rule and lends additional support to EPA's proposal not to regulate these units.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Randy Thurman and Brent Stevenson

Commenter Affiliation: Arkansas Environmental Federation and Arkansas Forest & Paper Council

Document Control Number: EPA-HQ-OAR-2006-0790-1830.1

Comment Excerpt Number: 2

Comment: As these rules become effective many of the facilities will switch to natural gas as their principal fuel. As proposed, these boilers are limited to use of liquid fuel for only 48 hours per year for testing and periods of gas curtailment or gas supply emergencies. Due to the critical function of many of these boilers, the rules should allow use of liquid fuel for up to 500 hours per year for gas-fired boilers. This small change would allow use of liquid fuels for a period of time limited to emissions usually considered insignificant under Arkansas and most other state air permitting programs and would serve as a easily measured limit to assure the boilers are operated as gas-fired boilers in the majority. The clarification would eliminate the confusion and differing opinions about what constitutes supply interruption.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Bob Perry

Commenter Affiliation: FirstEnergy Corp

Document Control Number: EPA-HQ-OAR-2006-0790-1959.1

Comment Excerpt Number: 2

Comment: Gas-fired auxiliary boilers are not subject to any requirements under the Proposed Rule, in stark contrast to the oil-fired auxiliary boilers requirements to comply with the very stringent CO emission limit and demonstrate compliance with that limit by following expensive monitoring requirements. The distinction between these two different types of auxiliary boilers is unnecessary and does not produce environmental benefits.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Sarah E. Amick
Commenter Affiliation: Rubber Manufacturers Association
Document Control Number: EPA-HQ-OAR-2006-0790-1918.1
Comment Excerpt Number: 5

Comment: EPA is authorized to regulate area sources under 112 in only two circumstances. First, 112(c)(3) provides that EPA “shall list” area source categories “which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section.” Second, 112(c)(6) authorizes EPA to “list categories and subcategories of sources” – including area sources – as necessary to meet the specified aggregate control requirement for the seven listed HAPs.

Gas-fired industrial boilers are clean burning and low emitting. There is no evidence in the rulemaking record (and no evidence generally) suggesting that HAP emissions from gas-fired area source industrial boilers present any “threat of adverse effects to human health or the environment,” much less any threat that would “warrant regulation” under 112. Moreover, the Agency has concluded that there is no need to regulate gas-fired area source industrial boilers to meet the requirements of 112(c)(6). Therefore, there is no basis for regulating gas-fired industrial boilers under the Area Source Rule.

Additionally, in the proposed MACT rule for major source industrial boilers, EPA proposes that work practice standards are appropriate and justified for units in the Gas 1 subcategory out of concern for the cost of complying with numeric emissions limitations and based on the adverse policy incentives that would be created. 75 Fed. Reg. at 32025. This rationale applies equally when considering the need to regulate gas-fired units under the Area Source Rule and lends additional support to EPA’s proposal not to regulate these units.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: John Huber
Commenter Affiliation: National Oilheat Research Alliance
Document Control Number: EPA-HQ-OAR-2006-0790-1831.1
Comment Excerpt Number: 18

Comment: Liquid-fueled boilers do not emit beryllium, ethylene dioxide, and PCB. Scientific data in NORA’s possession from EPA and others clearly indicates that Mercury, arsenic, beryllium, cadmium, lead, chromium, manganese, nickel, and POM (as 7-PAH) emissions from commercial and institutional liquid fuel boilers using #2 heating oil and #6 fuel oil are de minimis (Tables 1-3) and therefore should be exempt from the area source rule similar to natural gas and propane.

NORA has attached two recent articles detailing emissions from heating oil and residual fuel. The first is Physical and Chemical Characterization of Residential Oil Boiler Emissions Michael Hays, Lee Beck, Pamela Barfield, and Richard Lavrich. ENVIRONMENTAL SCIENCE & TECHNOLOGY / VOL. 42, NO. 7. The second is Select Trace Elemental Composition of Fuel

Oil Used in the Northeastern United States, John Graham, Journal of Air and Waste Management, May, 2010. (See submittal for attachments)

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Sean M. O'Keefe

Commenter Affiliation: Alexander and Baldwin, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-2274

Comment Excerpt Number: 1

Comment: As stated in the proposal, natural gas-fired area source boilers do not emit any of the urban hazardous air pollutants (HAPs) for which EPA must establish emission standards for area source boilers. Accordingly, regulation of gas-fired area source boilers is not necessary to meet the requirement of Clean Air Act section 112(c)(3) to ensure that 90 percent of emissions of the 30 urban HAPs are subject to regulation. A&B therefore requests that the proposed exemption for natural gas fired area source boilers be retained when the rule is finalized.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Regina Hopper

Commenter Affiliation: America's Natural Gas Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1998.1

Comment Excerpt Number: 1

Comment: The Proposed ICI Boiler MACT Rules are two of several elements of the Agency's broad strategy to reduce emissions of air pollutants from combustion sources, including Hazardous Air Pollutants ("HAPs") as well as other air pollutants such as sulfur dioxide and oxides of nitrogen. As the Agency has recognized, natural gas is "considered a 'clean' fuel," [Footnote: 75 Fed. Reg. 32006 (June 4, 2010) at 32029] one that can be used to achieve the overall emission reduction goals of the Clean Air Act (the "CAA" or "Act") and of Section 112 in particular. As the Agency moves forward with these and other rules under the CAA that impact combustion sources generally, it must be mindful of its emission reduction obligations and goals under the Clean Air Act and use its authority under the Act to the maximum extent possible to promote the use of cleaner fuels, including natural gas.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Barry Christensen
Commenter Affiliation: Occidental Chemical Corp
Document Control Number: EPA-HQ-OAR-2006-0790-2227.1
Comment Excerpt Number: 1

Comment: OCC strongly supports the exclusion of natural gas fired units from this proposed rule. OCC supports the conclusion that 90% of urban HAPs can be controlled as required by the Clean Air Act with the control of boilers and process heaters fired with fuels other than natural gas. Natural gas-fired area source boilers do not emit significant amounts of any of the urban air toxic pollutants for which area source boilers were listed and should not be under the scope of this rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Daniel Moss
Commenter Affiliation: Society of Chemical Manufacturers and Affiliates
Document Control Number: EPA-HQ-OAR-2006-0790-2018.1
Comment Excerpt Number: 1

Comment: SOCMA supports the proposed exemption for gas-fired boilers.

Perhaps more than any other provision in the proposed rule, the proposal to exempt gas-fired boilers from the Boiler Area Source rule (proposed 40 C.F.R. § 63.1195(a)) ensures that the proposal will not impose needless burdens.

The preamble recognizes that “[n]atural gas-fired area source boilers do not emit any of the urban HAP [for which the source category was listed under CAA Section 112(c)(3)].” [Footnote: 75 Fed. Reg. 31900 (June 4, 2010)]. It properly concludes, “[t]herefore, [that] regulation of gas-fired area source boilers is not necessary to meet the 90 percent requirement under section 112(c)(3) for these HAP.” [Footnote: 75 Fed. Reg. 31900 (June 4, 2010)]

Also, as EPA points out in the preamble to the Boiler Major Source rule, costly regulation of such low-emitting sources would be counterproductive from the perspective of environmental protection:

[W]e believe that proposing emission standards for gas-fired boilers that result in the need to employ the same emission control system as needed for the other fuel types would have the negative benefit of providing a disincentive for switching to gas as a control technique (and a pollution prevention technique) for boilers in the other fuel subcategories. In addition, emission limits on gas-fired boilers may have the negative benefit of providing an incentive for a facility to switch from gas (considered a clean" fuel) to a "dirtier" but cheaper fuel (i.e., coal). It would be inconsistent with the emissions reductions goals of the CAA, and of section 112 in particular,

to adopt requirements that would result in an overall increase in HAP emissions. [Footnote: 75 Fed. Reg. 32025 (June 4, 2010)]

Exclusion of natural-gas fired boilers from the Area Source rule will ensure that the majority of SOCMA members will not be affected by the rule, as confirmed by a recent SOCMA survey showing that more than 90% of boilers (110 out of 118) identified by survey respondents were gas-fired.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Duane Mummert

Commenter Affiliation: South Carolina Chamber of Commerce

Document Control Number: EPA-HQ-OAR-2006-0790-2247

Comment Excerpt Number: 1

Comment: The ETC supports a number of elements of EPA's proposal, particularly its conclusions not to regulate gas-fired units.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Pamela F. Faggert

Commenter Affiliation: Dominion

Document Control Number: EPA-HQ-OAR-2006-0790-2257.1

Comment Excerpt Number: 1

Comment: We strongly support EPA's decision to exclude boilers and process heaters that burn natural gas from the area source MACT rule. The HAP emissions from these units are so low that they are extremely difficult, if not impossible, to accurately measure. These vanishingly small emissions have not been found to pose risks to public health and the cost of controlling these units will greatly exceed any benefits that may result from such controls. Furthermore, as noted in its proposed MACT rulemaking for sources located at major sources of HAPs, EPA has stated (and we agree) that requiring emission controls for boilers burning gas fuels could discourage fuel switching to gas as a potential compliance option for boilers in other subcategories.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Bruce A. Steiner
Commenter Affiliation: American Coke and Coal Chemicals Institute
Document Control Number: EPA-HQ-OAR-2006-0790-2007
Comment Excerpt Number: 2

Comment: EPA is authorized to regulate area sources under §112 in only two circumstances. First, §112(c)(3) provides that EPA “shall list” area source categories “which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section.” Second, §112(c)(6) authorizes EPA to “list categories and subcategories of sources” – including area sources – as necessary to meet the specified aggregate control requirement for the seven listed HAPs.

Gas-fired industrial boilers are clean burning and low emitting. There is no evidence in the rulemaking record (and no evidence generally) suggesting that HAP emissions from gas-fired area source industrial boilers present any “threat of adverse effects to human health or the environment,” much less any threat that would “warrant regulation” under §112. Moreover, the agency has concluded that there is no need to regulate gas-fired area source industrial boilers to meet the requirements of §112(c)(6). Therefore, there is no basis for regulating gas-fired industrial boilers under the Proposed Rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Sheila C. Holman
Commenter Affiliation: North Carolina Department of Environment and Natural Resources
Document Control Number: EPA-HQ-OAR-2006-0790-2222.1
Comment Excerpt Number: 2

Comment: We agree with EPA’s proposed provisions not to regulate natural gas boilers under the GACT.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Daniel Moss
Commenter Affiliation: Society of Chemical Manufacturers and Affiliates
Document Control Number: EPA-HQ-OAR-2006-0790-2018.1
Comment Excerpt Number: 2

Comment: Relatedly, SOCMA also supports language in the definition of “gas-fired boiler” [Footnote: Proposed 40 C.F.R. § 63.11237.] that keeps within that subcategory boilers that burn liquid fuels “only during periods of gas curtailment, gas supply emergencies, or periodic testing of liquid fuel.” These events are inevitable or at least highly likely in the useful life of a boiler,

and it would be impractical and unreasonable to expect boiler operators to install control equipment and otherwise comply with this rule for those short periods. It would also be unreasonable, disruptive and potentially unsafe to require facilities to cease operating in such cases if they were not prepared to comply with those requirements.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Regina Hopper
Commenter Affiliation: America's Natural Gas Alliance
Document Control Number: EPA-HQ-OAR-2006-0790-1998.1
Comment Excerpt Number: 3

Comment: We also support the Agency's determination that "gas-fired area source boilers are not needed to meet the 90 percent requirement of section 112(c)(3) of the Clean Air Act" and that therefore such boilers are not subject to the Proposed Area Source ICI Boiler Rule. [Footnote: 75 Fed. Reg. 31896 (June 4, 2010)]

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Mary L. Frontczak
Commenter Affiliation: Peabody Energy
Document Control Number: EPA-HQ-OAR-2006-0790-2163.1
Comment Excerpt Number: 3

Comment: EPA's rationales for establishing strict standards for coal-fueled boilers and virtually none for natural gas-fueled boilers cannot be justified under the CAA or Equal Protection

1. EPA's application of the statutory MACT standards to coal plants

EPA offers a series of policy justifications for its decision to forego establishing MACT standards for natural gas-fueled boilers. None of these rationales, however, have anything to do with section 112 of the CAA. Indeed, EPA's decision not to establish MACT standards for natural gas-fueled boilers appears to directly violate that provision. EPA's proposed differential treatment of natural gas-fueled and coal-fueled boilers thus violates both the CAA and Equal Protection.

Section 112 governs emissions of HAPs. Section 112(d) requires EPA to establish MACT standards for each category or subcategory of major sources and area sources of HAPs that EPA has listed for regulation under section 112(c). EPA proposes to list both coal and natural gas-fueled boilers for regulation under section 112(c). Hence, EPA is required to issue MACT

standards for both coal and natural gas-fueled boilers. [Footnote: Unless EPA can justify establishing a work practice or other standard under section 112(d)(3). See discussion in next section below.]

EPA has limited discretion in setting those standards. Section 112(d)(3) requires that MACT standards for existing sources in a category "shall not be less stringent, and may be more stringent than---(A) the average emission limitation achieved by the best performing 12 percent of the existing sources" in that category. For new sources in a category, section 112(d)(3) requires that the maximum achievable degree of reduction in emissions "shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source" in the category.² These standards are often referred to as "MACT floor" standards, as EPA has authority to establish even stricter standards.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: William Rogers
Commenter Affiliation: DTE Energy
Document Control Number: EPA-HQ-OAR-2006-0790-2159.1
Comment Excerpt Number: 4

Comment: DTE Energy supports EPA's decision to exclude natural gas fired equipment located at area sources from regulation. We agree with EPA's determination that natural gas fired area source boilers do not emit urban HAP of concern to this rule making.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Chelly Reesman
Commenter Affiliation: JR Simplot Company
Document Control Number: EPA-HQ-OAR-2006-0790-2244
Comment Excerpt Number: 4

Comment: Based on the definition of Gaseous Fuels in the proposed rule, biogas is regulated as such. Simplot generates biogas from wastewater treatment facilities associated with potato processing. This gas is used to supplement natural gas or hydrogen fuel to boilers. It is our understanding that gas-fired boilers are specifically "not subject to" the rule. Please confirm our understanding.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Mary L. Frontczak
Commenter Affiliation: Peabody Energy
Document Control Number: EPA-HQ-OAR-2006-0790-2163.1
Comment Excerpt Number: 4

Comment: The term "feasible" has a specific meaning in the context of section 112(h). Section 112(h)(2) provides that emission standards are to be considered infeasible only if the pollutants at issue "cannot be emitted through a conveyance designed and constructed to emit or capture such pollutant" [Footnote: 42 U.S.C. § 7412(h)(2)(A).] or if measurement of the pollutant "is not practicable due to technological and economic imitations." [Footnote: 42 U.S.C. § 7412(11)(2)(B).]

The regulatory preamble to the proposed rule, however, did not even attempt to show that gas units meet this standard for infeasibility. Instead, EPA relied on policy and cost concerns discussed in the next section of these comments below. EPA's failure in this regard contrasts with EPA's rationale for promulgating a work practice standard for small-diameter stacks (less than 12 inches), where EPA justified its proposal for such a standard with reference to the specific language of section 112(h)(2). EPA did not explain why it undertook the required statutory analysis in proposing a work practice standard for small units but did not do so for gas units. As the United States Court of Appeals for the D.C. Circuit has said, section 112(h) "allows EPA to substitute work practice standards for emission floors only if measuring emission levels is technologically or economically impracticable." [Footnote: *Sierra Club v. EPA*, 479 F.3d at 884.] Here, EPA never made such a finding for natural gas-fueled boilers.

Interestingly, EPA states that "[w]e" are specifically seeking comment on whether the application of measurement methodology to sources in [the gas unit] subcategory is impracticable due to technological or economic limitations as specified in section 112(h)(2)(B)," but then states that EPA's reasons for proposing a work practice standard for gas units are based on the policy and cost concerns discussed below that are not provided for in section 112(h). This places EPA in the untenable position of having proposed a work practice standard for reasons that do not pertain to the requirements of section 112(h), while asking the public to supply it with a basis that would comply with that statute. At the very least, if EPA wishes to base a work practice standard for gas units based on information and rationales that the Agency does not now have but hopes to have in the future, the Agency will need to repropose the rule if and when it receives that information so the public can comment on it. Even then, EPA may not be able to cure the bias demonstrated by its desire to favor gas units based on the Agency's non-statutory policy views.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: David M. Kiser

Commenter Affiliation: International Paper Company
Document Control Number: EPA-HQ-OAR-2006-0790-1924.1
Comment Excerpt Number: 4

Comment: International Paper agrees that regulation of gas-fired area source boilers is not necessary to meet the 90 percent HAP reduction requirement under section 112(c)(3) of the CAA.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Mary L. Frontczak
Commenter Affiliation: Peabody Energy
Document Control Number: EPA-HQ-OAR-2006-0790-2163.1
Comment Excerpt Number: 5

Comment: Instead of justifying its decision to apply work practice standards to gas units under section 112(h), EPA offers several policy rationales for that decision. In discussing its rationales for applying a work practice standard to existing gas-fueled boilers, EPA first cites cost considerations, referring to the Agency's estimate of more than \$14 billion capital cost for owners of those units to install emission controls, which EPA says "is higher than the estimated combined capital cost for boilers and process heaters in all of the other subcategories." [Footnote: 75 Fed. Reg. at 32025/2. EPA uses these same rationales in its discussion of new gas-fueled boilers. See id. at 32029/2-3.] EPA concludes that this cost is too high to justify emission limits for gas units.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Lisa Jacobson
Commenter Affiliation: Business Council for Sustainable Energy
Document Control Number: EPA-HQ-OAR-2006-0790-1991.1
Comment Excerpt Number: 5

Comment: The BCSE has also long supported policies and regulations that recognize natural gas as a clean, affordable, and abundant domestic fuel. [Reference: The Future of Natural Gas: An Interdisciplinary MIT Study, MIT Energy Initiative (June 25, 2010). A copy is available at <http://web.mit.edu/mitei/research/studies/naturalgas.html>. Also consult Abundant Shale Gas Resources: Some Implications for Energy Policy, Resources for the Future (April 2010). A copy is available at <http://www.rff.org/RFF/Documents/RFF-BCK-Brownetal-ShaleGas.pdf>.] The Council continues to urge EPA in these Rulemakings and, again, in general to take advantage of those attributes to provide improved environmental outcomes. Along with others,

the Council affirms EPA's determination that natural gas-fired boilers and process heaters are not subject to area source regulation as these units do not emit the relevant urban HAP. The Council again encourages EPA to consider the technical comments submitted by BCSE members on how to best utilize and regulate natural gas-fired boilers and process heaters at major sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Mary L. Frontczak

Commenter Affiliation: Peabody Energy

Document Control Number: EPA-HQ-OAR-2006-0790-2163.1

Comment Excerpt Number: 6

Comment: EPA states that establishing a MACT standard for natural gas-fueled boilers would have, in EPA's estimation, "the "negative" effect of incenting natural gas-fueled boilers to fuel switch to coal and disincenting coal-fueled boilers to switch to natural gas. According to EPA:

proposing emission standards for gas-fueled boilers and process heaters that result in the need to employ the same emission control system as needed for the other fuel types would have the negative benefit of providing a disincentive for switching to gas as a control technique (and a pollution prevention technique) for boilers and process heaters in the other fuel subcategories.

At the same time, according to EPA, establishing MACT standards for natural gas-fueled boilers would incent gas boilers to switch to coal:

In addition, emission limits on gas-fueled boilers and process heaters may have the negative effect of providing an incentive for a facility to switch from gas (considered a "clean" fuel) to a "dirtier" but cheaper fuel (i.e., coal). It would be inconsistent with the emission reductions goals of the CAA, and of section 112 in particular, to adopt requirements that would result in an overall increase in HAP emissions.

All of these rationales, however, suffer from the same flaw: they invoke policy considerations that are not relevant in setting MACT floor standards. The only relevant factor in setting a MACT floor standard for new units is the control level achieved by the best-controlled similar source, and the only relevant factor for setting a MACT floor standard for existing sources is the control level achieved by the best performing 12 percent of the existing sources in that subcategory. Similarly, the only relevant statutory factors in determining whether to apply a work practice standard are whether the hazardous air pollutant cannot be emitted through a conveyance designed and constructed to emit or capture that pollutant, whether the use of such a conveyance would be inconsistent with law, or whether the application of measurement methodology is not practicable due to technological and economic limitations.

As the courts have repeatedly said, EPA has limited discretion in setting MACT floor standards. EPA may not, for instance, consider whether the standard is "achievable" by all sources in the

relevant category or subcategory, only that it has been achieved by the top 12 percent of such sources. [Footnote: See *Cement Kiln Recycling Coalition v. EPA*, 255 F.3d 855, 859 (D.C. Cir. 2001).] And it may not take liberties with the statutory language in order to address concerns of "industry members insisting] that installing the devices used by the best-performing sources would be technologically and economically infeasible." [Footnote: *Sierra Club v. EPA*, 479 F.3d 875, 879-80 (D.C. Cir. 2007). See also the Court's discussion of the various other flaws in EPA's MACT analysis, which the Court said were "all variations on the Agency's fundamental failure to set floors at the emission levels actually achieved by the best-performing sources." *Id.* at 881.] These cases are so clear that EPA itself states, in one part of the boiler MACT preamble, that "EPA may not consider costs or other impacts in determining the MACT floor."

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Chris V. Isaacson

Commenter Affiliation: Alabama Forestry Association

Document Control Number: EPA-HQ-OAR-2006-0790-2060

Comment Excerpt Number: 12

Comment: We support EPA's proposal not to regulate gas-fired industrial boilers under the Area Source Rule.

EPA is authorized to regulate area sources under 112 in only two circumstances. First, 112(c)(3) provides that EPA "shall list" area source categories "which the Administrator finds presents a threat of adverse effects to human health or the environment .. warranting regulation under this section." Second, 112(c)(6) authorizes EPA to "list categories and subcategories of sources" — including area sources — as necessary to meet the specified aggregate control requirement for the seven listed HAPs.

Gas-fired industrial boilers are clean burning and low emitting. There is no evidence in the rulemaking record (and no evidence generally) suggesting that HAP emissions from gas-fired area source industrial boilers present any "threat of adverse effects to human health or the environment," much less any threat that would "warrant regulation" under 112. Moreover, the Agency has concluded that there is no need to regulate gas-fired area source industrial boilers to meet the requirements of 112(c)(6). Therefore, there is no basis for regulating gas-fired industrial boilers under the Area Source Rule.

Additionally, in the proposed MACT rule for major source industrial boilers, EPA proposes that work practice standards are appropriate and justified for units in the Gas 1 subcategory out of concern for the cost of complying with numeric emissions limitations and based on the adverse policy incentives that would be created. 75 Fed. Reg. at 32025. This rationale applies equally when considering the need to regulate gas-fired units under the Area Source Rule and lends additional support to EPA's proposal not to regulate these units.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Kevin M. Dempsey

Commenter Affiliation: American Iron and Steel Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2061

Comment Excerpt Number: 13

Comment: If EPA Proceeds to a Final Rule for Area Source Boilers, AISI Supports EPA's Proposal Not to Regulate Gas-Fired Industrial Boilers under the Area Source Rule

EPA is authorized to regulate area sources under §112 in only two circumstances. First, 112(c)(3) provides that EPA “shall list” area source categories “which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section.” Second, §112(c)(6) authorizes EPA to “list categories and subcategories of sources” – including area sources – as necessary to meet the specified aggregate control requirement for the seven listed HAPs.

Gas-fired industrial boilers are clean burning and low emitting. There is no evidence in the rulemaking record (and no evidence generally) suggesting that HAP emissions from gas-fired area source industrial boilers present any “threat of adverse effects to human health or the environment,” much less any threat that would “warrant regulation” under §112. Moreover, the agency has concluded that there is no need to regulate gas-fired area source industrial boilers to meet the requirements of §112(c)(6). Therefore, there is no basis for regulating gas-fired industrial boilers under the Area Source Rule.

Additionally, in the proposed MACT rule for major source industrial boilers (Subpart DDDDD), EPA proposes that work practice standards are appropriate and justified for units in the Gas 1 subcategory out of concern for the cost of complying with numeric emissions limitations and based on the adverse policy incentives that would be created. 75 Fed. Reg. at 32025. This rationale applies equally when considering the need to regulate gas-fired units under the Area Source Rule and lends additional support to EPA's proposal not to regulate these units.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Kevin M. Dempsey

Commenter Affiliation: American Iron and Steel Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2061

Comment Excerpt Number: 15

Comment: If the qualification of liquid fuel usage remains in the definition of gas-fired boiler, we suggest adding further clarifying language that is contained in the definition of a waste heat boiler in the proposed Subpart DDDDD applicable to boilers at major sources. Waste heat boilers are exempt from that rule. (Blast furnace gas - a process gas that is recovered for its heat value just as is coke oven gas and other process gases- is also exempt under that rule.) The waste heat boiler definition in the proposed rule for boilers at major sources is limited to units designed to use no more than 50% of the total heat input capacity of the unit with supplemental burners. We believe that the environmental and energy conservation benefits of using process gases are comparable to the use of waste heat or blast furnace gas and that the same provisions for using supplemental fuels should apply to units intended to utilize all process gas. Accordingly, applying the same rationale, we urge EPA to modify the gas-fired boiler exemption to include those units designed to use supplemental fuels up to 50% of the total heat input capacity of the unit.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: John Donahue

Commenter Affiliation: Sappi Fine Paper North America

Document Control Number: EPA-HQ-OAR-2006-0790-2210.1

Comment Excerpt Number: 15

Comment: EPA is authorized to regulate area sources under § 112 in only two circumstances. First, § 112(c)(3) provides that EPA “shall list” area source categories “which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section.” Second, § 112(c)(6) authorizes EPA to “list categories and subcategories of sources” – including area sources – as necessary to meet the specified aggregate control requirement for the seven listed HAPs.

Gas-fired industrial boilers are clean burning and low emitting. There is no evidence in the rulemaking record (and no evidence generally) suggesting that HAP emissions from gas-fired area source industrial boilers present any “threat of adverse effects to human health or the environment,” much less any threat that would “warrant regulation” under § 112. Moreover, the Agency has concluded that there is no need to regulate gas-fired area source industrial boilers to meet the requirements of § 112(c)(6). Therefore, there is no basis for regulating gas-fired industrial boilers under the Area Source Rule.

Additionally, in the proposed MACT rule for major source industrial boilers, EPA proposes that work practice standards are appropriate and justified for units in the Gas 1 subcategory out of concern for the cost of complying with numeric emissions limitations and based on the adverse policy incentives that would be created. 75 Fed. Reg. at 32025. This rationale applies equally when considering the need to regulate gas-fired units under the Area Source Rule and lends additional support to EPA’s proposal not to regulate these units.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Wayne J. Galler

Commenter Affiliation: Georgia Industry Environmental Coalition, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1997.1

Comment Excerpt Number: 19

Comment: EPA is authorized to regulate area sources under 112 in two circumstances. First, 112(c)(3) provides that EPA "shall list" area source categories "which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section." Second, 112(c)(6) authorizes EPA to "list categories and subcategories of sources" - including area sources - as necessary to meet the specified aggregate control requirement for the seven listed HAPs.

Gas-fired industrial boilers are clean burning and low emitting. There is no evidence in the rulemaking record (and no evidence generally) suggesting that HAP emissions from gas-fired area source industrial boilers present any "threat of adverse effects to human health or the environment," much less any threat that would "warrant regulation" under 112. Moreover, the Agency has concluded that there is no need to regulate gas-fired area source industrial boilers to meet the requirements of 112(c)(6). Therefore, there is no basis for regulating gas-fired industrial boilers under the Area Source Rule.

Additionally, in the proposed MACT rule for major source industrial boilers, EPA proposes that work practice standards are appropriate and justified for units in the Gas 1 subcategory out of concern for the cost of complying with numeric emissions limitations and based on the adverse policy incentives that would be created. [75 Fed. Reg. at 32025]. This rationale applies equally when considering the need to regulate gas-fired units under the Area Source Rule and lends additional support to EPA's proposal not to regulate these units. GIEC supports EPA's position for these units.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Commenter Name: Regina Hopper

Commenter Affiliation: America's Natural Gas Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1998.1

Comment Excerpt Number: 19

Comment: ANGA strongly supports the Agency's proposal to apply work practice standards to major source boilers and process heaters using natural gas, and to exclude gas-fired area sources from coverage, and believes that these approaches are more than justified under the relevant provisions of the Clean Air Act.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 1 for discussion of excluding gas units.

Legal/Applicability: Authority for Setting MACT Standards for Hg/POM for Area Sources

Commenter Name: N/A

Commenter Affiliation: N/A

Document Control Number: EPA-HQ-OAR-2006-0790-0067.1

Comment Excerpt Number: 1

Comment: The USEPA proposes to set a mercury emission limit for coal fired boiler area sources. This limit is based on Maximum Available Control Technology (MACT) for the source category despite the Clean Air Act Amendments of 1990 (CAA) requiring that area sources only use Generally Accepted Control Technology (GACT). GACT takes the financial burden of installing emission controls into account, while MACT does not. It is my belief that the USEPA has not adequately justified the need to use MACT. The proposed NESHAP states that these sources account for 4.3% of all mercury emissions, but this is based on data from 1990 (Federal Register, June 4, 2010). Since that time many industrial facilities have shutdown or moved to foreign countries while most coal fired major sources are still in operation. Today, major sources likely account for a greater fraction of total mercury emissions than they did in 1990. USEPA should re-assess the contribution of area sources to overall mercury emissions in light of changes to industrial activity during the past 20 years, and determine whether area sources are actually needed in order to regulate 90% of all mercury emissions. When Congress enacted the CAA amendments in 1990, they differentiated smaller sources from larger sources for a reason. That was to prevent an undue financial burden on these smaller sources. It is my opinion that other methods of regulating coal fired boiler area sources should be explored so that the financial burden of MACT does not fall onto smaller sources.

Response: As explained more fully in the preamble, EPA does not believe the statute permits the use of GACT for area sources that must be regulated to meet the 90 percent threshold in CAA section 112(c)(6). Furthermore, the record contains EPA's estimate of the percentage of mercury and POM emissions regulated by this rule relative to the 90 percent threshold for mercury and POM emissions under that section. The agency is establishing this rule to help satisfy its obligation under CAA section 112(c)(6). The obligation is phrased in terms of regulating "not less than ninety percentum" of the emissions, therefore a decision to regulate coal-fired boilers rather than some possible combination that may have left the coal subcategory unregulated is not inconsistent with the statute. The statute affords EPA discretion on which categories to regulate to meet its obligation.

According to EPA's analysis of the emission inventory for 1990 for the substances listed under CAA section 112(c)(6) and EPA's regulations under section 112, EPA needs to regulate coal-fired boilers at area sources to achieve the 90 percent threshold for Hg and POM. With respect to Hg from coal, individual pounds from coal-fired sources are, when aggregated across the category, significant relative to a 90% threshold and in comparison to other, unregulated categories.

At this time, EPA does not believe MACT-based regulation is needed for biomass or liquid-fired boilers at area sources to meet these thresholds, and therefore has not issued MACT-based regulations for these subcategories.

The statutory requirement of a deadline for listing requires a fixed date for the emission inventory rather than one a changing inventory based on today's emissions (which are well after the statutory date).

Because the mercury control for biomass area source boilers is GACT based, limited to a tune up or a tune up and an energy assessment, and does not establish a numeric limit for Hg, any ash testing would not be appropriate to ensure compliance with this standard.

Courts have approved EPA's use of surrogates for HAP listed under CAA section 112(b). The inclusion of individual HAP on the CAA section 112(c)(6) list should not change the analysis of EPA's authority to use a surrogate for a HAP in appropriate circumstances (that is, if it is appropriate to use a surrogate for a HAP listed under section 112(b), it should be appropriate to use a surrogate for the same HAP listed in section 112(c)(6)).

Commenters failed to supply data to support a health based compliance alternative for large coal fired area sources, which are the only sources in this category subject to numeric limits for Hg or POM.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 2

Comment: Under Boiler MACT we need to – EPA should set numeric limits for CO for biomass and oil-fired limits located at small mills — should not set numeric limits for those but instead, set good combustion practices and tune-up requirements.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Sheldon Schultz

Commenter Affiliation: Yanke Energy

Document Control Number: EPA-HQ-OAR-2006-0790-0837

Comment Excerpt Number: 8

Comment: The Clean Air Act leading to MACT is about minimizing urban HAP emissions. Most wood waste and biomass boilers are in a rural not urban setting. The significance of the setting is one of background levels, and human exposure to HAP. The location also has an important role to play in the economic impact in that the source is often the only source of high paying, full benefit jobs in the rural setting.

All solid fuel boilers should be required to test their fuel for mercury. Comment to page 15 of 196. Biomass ash content is typically on the order of 1% dry basis while as fired dry ash content is 3 to 5% due to contamination. The contamination is due to dirt where the biomass material is handled and the mercury level of the dirt will vary over a

wide range. This approach should be used for all metals and for chlorine as it is inexpensive and can be used to determine if further measurements such as stack tests are required.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 17

Comment: EPA needs to provide cost-effective approaches. For one, EPA should reconsider the application of a carbon monoxide standard to area sources. The EPA has the authority to mandate work practices for these sources. Setting good combustion practices and tune-up requirements will produce effective environmental results at far lower costs.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 39

Comment: Under Boiler GACT we believe EPA should not set numerical limits for CO for biomass and oil-fired boilers located at small mills, but instead set good combustion practices and tune-up requirements that will achieve the same results at a far lower cost.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Los Angeles Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0397
Comment Excerpt Number: 52

Comment: To reduce HAP emissions from area sources EPA's numerous options including work practice and operational standards. We encourage EPA to utilize such options in lieu of emission limits for existing biomass boilers.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Mike Hubbard
Commenter Affiliation: National Council of Textile Organizations
Document Control Number: EPA-HQ-OAR-2006-0790-1062
Comment Excerpt Number: 1

Comment: The Clean Air Act Section 112 (c) (6) mandates that maximum achievable controls (MACT) be imposed on sources emitting at least 90 percent of mercury emissions. However, EPA is basing the need for this standard on a belief, not a scientifically justified fact, that this goal can be reached in a meaningful way by including minor sources. If one pound of mercury is produced for every 10,000 tons of coal burned, companies using between 10,000 - 50,000 pounds will incur significant costs to achieve miniscule reductions. Our companies with boilers covered by this rule have already gone to great expense to avoid MACT altogether, but will now be covered due to a single pound of mercury. It is unreasonable and expensive for these companies to comply with MACT controls, reporting, and record keeping for such minor sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Houston Public Hearing Transcript
Commenter Affiliation: See transcript for detailed list of commenters
Document Control Number: EPA-HQ-OAR-2006-0790-0985
Comment Excerpt Number: 3

Comment: Eliminate carbon monoxide limits for biomass boilers under the area source rule, and its -- and instead regulating these small sources using the tune-up work practice requirements.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Charles Thomas III

Commenter Affiliation: Shuqualak Lumber Co., Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-0609

Comment Excerpt Number: 4

Comment: EPA should abandon the proposed CO limits for area source boilers and use work practices to ensure good combustion practices are being followed.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 23

Comment: We believe the EPA should not set numerical limits for the boilers located in small mills, but instead set good combustion practices and tune-up requirements that will achieve the same results at a far lower cost. The EPA should use its own discretion so as not to burden facilities that are still hurting from the building downturn.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 36

Comment: Biomass boilers at area sources represent a low risk and the CO limits should be eliminated in favor of tune-ups and work practices. If CO limits are retained, they should not be more stringent than for major sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 62

Comment: Under Boiler GACT, we believe EPA should not set numerical limits for CO for biomass and oil-fired boilers located at small mills, but instead set good combustion practices and tune-up requirements that will achieve the same results at far lower cost.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Michael J. Hagenbarth

Commenter Affiliation: RockTenn

Document Control Number: EPA-HQ-OAR-2006-0790-1473.1

Comment Excerpt Number: 1

Comment: EPA's Area Source proposal for the § 112(c)(6) pollutants is flawed because the Agency provides no basis for its assertion that mercury ("Hg") and polycyclic organic matter ("POM") must be regulated under this standard in order to satisfy the requirement that 90% of nationwide emissions of these pollutants must be regulated under § 112 standards. In 1998, when EPA published the list of source categories that must be regulated to meet the § 112(c)(6) 90% control requirement, the Agency did not draw firm conclusions as to whether any area source categories needed to be regulated. Instead, EPA explained that it "will determine whether specific regulation of the area source component of a source category is appropriate, or necessary to meet the 90 percent goal, based on more source category-specific data collected as part of the regulatory process." {Footnote: 63 FR 17838, 17842 (Apr. 10, 1998)}

With regard to POM, the proposed Industrial Boiler GACT and supporting documentation provides no such additional analysis justifying the need to regulate area source POM emissions to satisfy § 112(c)(6). The preamble simply asserts, with no further analysis or supporting information, that "[w]e continue to believe that we must regulate POM from coal-fired, biomass-fired, and oil-fired area source boilers in order to meet the requirement in section 112(c)(6)." In light of the failure of the 1998 notice to provide justification for regulating area source categories, this conclusory assertion does not provide a rational basis or adequate factual justification to support the proposed determination that area source industrial boilers must be regulated to satisfy the § 112(c)(6) 90% requirement.

Similarly, with regard to Hg, the preamble to the area source proposal states that "based on the information we have learned to date as we are developing standards for various source categories, such as major source boilers, gold mines, commercial and industrial solid waste incinerators, and other categories, we believe that we only need coal-fired area source boilers to meet the 90 percent requirement set forth in section 112(c)(6) for mercury." The area source MACT floor memo further explains that:

EPA estimates that they have subjected to regulation or propose to regulate 90.3 percent of the 172.3 tons in the 1990 emissions inventory for mercury. Coal-fired area source boilers would provide an additional 0.72 percent. Regulation of these boilers under MACT would provide an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met.

To begin, neither the proposed rule nor the MACT floor memo provide data that support the proposed determination that 90.3 percent of the 1990 emissions inventory for mercury is subject to regulation. The proposed rule simply makes a conclusory assertion that is unsupported by facts or relevant information, which renders any final action based on this assertion invalid for failure to provide adequate record support.

Moreover, assuming for the sake of argument that the analysis is correct and adequately supported, § 112(c)(6) does not obligate EPA to regulate in order to provide "an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met." EPA has either exceeded the 90% standard or not. When the facts show that the 90% standard is met, EPA has satisfied its § 112(c)(6) obligation. When the facts are not sufficient for EPA to reliably draw conclusions, EPA's obligation is to seek the additional information necessary to determine whether additional regulations are needed to meet the 90% standard. EPA's obligation to provide record support for its regulatory decisions is turned on its head by the assertion that the lack of facts or uncertainty as to the available information justifies additional regulation under § 112(c)(6).

Even if EPA needed to regulate area source industrial boilers to meet § 112(c)(6), it would not be required to adopt MACT standards.

CAA § 112(d)(5) authorizes EPA in most cases to set standards for area sources using "generally available control technologies or management practices" (i.e., "GACT") rather than "MACT." Section 112(d)(5) establishes a special rule for area source standards. It provides, "With respect to categories and subcategories of area sources listed pursuant to [§ 112(c)], the Administrator may, in lieu of the authorities provided in [§ 112(d)] ... elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources." In other words, EPA may establish "GACT" standards for area sources rather than "MACT" standards under § 112(d).

EPA takes the position in the proposal that it cannot use GACT to regulate HAP emissions from area source categories that are subject to § 112(c)(6). This position suffers from two fundamental flaws. The first problem is that it ignores the language in § 112(d)(5) that defines the scope of the Agency's authority to use GACT. Section 112(d)(5) expressly states that EPA is authorized to

use GACT "[w]ith respect to categories and subcategories of area sources listed pursuant to [§ 112(c)]." The CAA provides only two ways for EPA to list an area source category for purposes of regulating HAP emissions from the category under § 112. First, § 112(c)(3) — which is aptly entitled "Area Sources" — provides that EPA "shall list" area source categories which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section."

Second, § 112(c)(6) authorizes EPA to "list categories and subcategories of sources" —including area sources — as necessary to meet the specified aggregate control requirement for the seven listed HAPs. Since all area source categories — including those listed under § 112(c)(6) — are listed "pursuant to § 112(c)," EPA has authority under the express terms of § 112(d)(5) to use GACT in regulating area source categories listed and regulated under to § 112(c)(6).

A fundamental problem with EPA's position is that it ignores the language in § 112(d)(5) authorizing EPA to use the GACT method "in lieu of the § 112(d)(2) MACT procedure. EPA itself has observed that the term "in lieu of is commonly understood to mean "in place the of and, thus, has previously correctly concluded that, "CAA section 112(d)(5) authorizes EPA to promulgate standards under CAA section 112(d)(5) that provide for the use of generally available control technologies or management practices (GACT), instead of issuing MACT standards pursuant to CAA section 112(d)(2) and (d)(3)." [Footnote: 73 FR 1916,1920-1921 (Jan. 10, 2008)] In short, the statute plainly says that the requirement to set a standard under § 112(d)(2) can be satisfied by using the alternative GACT procedure specified in § 112(d)(5). As a result, setting GACT under § 112(d)(5) meets the §112(c)(6) requirement to regulate under § 112(d)(2).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: N/A

Commenter Affiliation: Sierra Club, Earth Justice, Clean Air Task Force, Natural Resources Defense Council

Document Control Number: EPA-HQ-OAR-2006-0790-1982.1

Comment Excerpt Number: 3

Comment: Section 112(c)(6) provides that "[w]ith respect to" the pollutants it enumerates, EPA must assure that sources accounting for ninety percent of the emissions of those pollutants are subject to standards under § 112(d)(2) or (d)(4). Thus, EPA must assure that area source boilers are subject to § 112(d)(2) or (d)(4) standards with respect to POM.

EPA claims that it has met its obligations under § 112(c)(6) by setting by setting carbon monoxide (CO) standards for area source boilers. 75 Fed. Reg. at 31917-31918. The agency states that CO is an "effective surrogate" for POM "because CO, like POM, is formed as a product of incomplete combustion." Id. at 31918.

As shown below, CO is not a valid surrogate for POM or any of the other of the organic hazardous air pollutants that area source boilers emit. Even if CO were a valid surrogate, however, § 112(c)(6) requires EPA to set § 112(d)(2) or (d)(4) standards with respect to POM.

Regardless of what authority EPA might have to use surrogates for other hazardous air pollutants, the agency must set specific emission standards under § 112(d)(2) or (d)(4) for the ones enumerated in § 112(c)(6), including POM.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners, CIBO

Document Control Number: EPA-HQ-OAR-2006-0790-1783.1

Comment Excerpt Number: 6

Comment: EPA proposes to impose MACT standards for polycyclic organic matter (POM) and mercury. 75 FR 31896. EPA should amend the rule so that GACT is applied in all cases where it is authorized. Under the CAA, § 112(d)(5) establishes the standard setting methodology for area sources. Section 112(d)(5) provides that

“[w]ith respect to categories and subcategories of area sources listed pursuant to [§ 112(c)], the Administrator may, in lieu of the authorities provided in [§ 112(d)] ... elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources.”

42 USC § 7412(d)(5) (emphasis added). This section gives EPA the authority to promulgate GACT standards for area sources rather than MACT standards under § 112(d). While the statute does not define a method for establishing GACT standards, EPA construes this authority as providing more flexibility than the MACT standard setting process. In fact, one important difference is that “[i]n determining GACT for a particular source category, [EPA] consider[s] the costs and economic impacts of available control technologies and management practices on that category.” 75 FR 31920. However, for certain area source standards, EPA interprets the CAA to require MACT. See, e.g., 72 FR 53814, 53815-16 (Sept. 20, 2007). Because cost cannot be considered in determining MACT, area source standards for § 112(c)(6) pollutants are more stringent than they would be if EPA applied GACT.

EPA has failed to provide justification for applying MACT to POM and mercury emissions. Therefore, its approach is unreasonable. CIBO recommends that EPA implement GACT in cases where it is authorized. Such an approach will give EPA the necessary discretion as needed when dealing with small source. Furthermore, EPA should utilize work practice standards in lieu of numerical emission limits when that option is available.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Andrea Grant
Commenter Affiliation: Castle Oil Corporation
Document Control Number: EPA-HQ-OAR-2006-0790-1945.1
Comment Excerpt Number: 1

Comment: In the Preamble, EPA states that it must establish maximum achievable control technologies ("MACT") standards for each of the pollutants identified in Section 112(c)(6) of the Clean Air Act needed to achieve regulation of 90 percent of the emissions of the relevant pollutant and generally available control technologies ("GACT") standards for hazardous air pollutants listed pursuant to Section 112(c)(3). EPA continues on and explains that during the emission standard-setting process, it learns more about each source category. However, without citing specific justification or findings, the Agency says that it must regulate polycyclic organic matter ("POM") from all of three types of Area Source boilers in order to meet the requirements in Section 112 (c)(6) and then proposes the MACT standard. Thus, EPA has not demonstrated that it must regulate POM to meet the 90 percent standard.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Stephen E. Woock
Commenter Affiliation: Weyerhaeuser Company
Document Control Number: EPA-HQ-OAR-2006-0790-1984.1
Comment Excerpt Number: 1

Comment: EPA has the statutory authority and discretion to establish GACT in the form of work practices for the boiler NESHAP, and should eliminate its proposed MACT standards for these boilers. EPA has proposed to impose on existing and new area source boilers extremely stringent numeric CO emissions limitations [Footnote: EPA also proposes other emission limitations (e.g., mercury and PM) for certain boilers, and we disagree with those numeric limits as well. We focus on CO since that is the proposed limit applicable to our existing area source biomass boilers.] as a surrogate for polycyclic organic matter (POM). These limits would be infeasible to meet. In fact, the proposed area source CO limits for biomass boilers are, incongruously, far more stringent than those proposed for the major source Boiler MACT. We believe that EPA has not justified the need to impose numeric emissions limitations on area source industrial boilers and that the Agency has the authority and justification for establishing work practice standards for all area source boilers instead. Even if EPA believed it must finalize some of the numeric emissions limits for these area source boilers under its CAA §112(c)(6) evaluation, the proposed CO standards are not supported by the available data and would have to be substantially modified. We refer EPA to the extensive discussion in the comments filed by the AWC and by NEDA, regarding the legal foundation of EPA's authority to limit its NESHAP requirements to GACT in the form of work practices for these sources, and the technical evaluation of the non-representative data EPA used to establish its proposed numerical standards.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jeffery S. Hannapel

Commenter Affiliation: National Association for Surface Finishing

Document Control Number: EPA-HQ-OAR-2006-0790-1840.1

Comment Excerpt Number: 1

Comment: EPA's proposed Boiler GACT is flawed because the Agency provides no basis for its assertion that mercury (Hg) and polycyclic organic matter (POM) must be regulated under this standard in order to satisfy the requirement that 90 percent of nationwide emissions of these pollutants must be regulated under Clean Air Act (CAA) section 112 standards. In 1998 when EPA published the list of source categories that must be regulated to meet the 90 percent control requirement of section 112 (c)(6) of the CAA, the Agency did not specifically conclude that area source categories needed to be regulated. Instead, EPA explained that it "will determine whether specific regulation of the area source component of a source category is appropriate, or necessary to meet the 90 percent goal, based on more source category-specific data collected as part of the regulatory process." 63 Fed. Reg. 17838, 17842 (April 10, 1998).

With regard to POM, the proposed Boiler GACT and supporting documentation provides no such additional analysis justifying the need to regulate area source POM emissions pursuant to section 112(c)(6) of the CAA. The preamble simply asserts, with no further analysis or supporting information, that "[w]e continue to believe that we must regulate POM from coal-fired, biomass-fired, and oil-fired area source boilers in order to meet the requirement in section 112(c)(6)." 75 Fed. Reg. at 31904. Without specific justification for regulating area source categories, EPA's conclusory assertion does not provide a rational basis or adequate factual justification to support the proposed determination that area source industrial boilers must be regulated to satisfy the 90 percent requirement of section 112(c)(6) of the CAA.

Similarly, with regard to Hg the preamble to the proposed Boiler GACT states that "based on the information we have learned to date as we are developing standards for various source categories, such as major source boilers, gold mines, commercial and industrial solid waste incinerators, and other categories, we believe that we only need coal-fired area source boilers to meet the 90 percent requirement set forth in section 112(c)(6) for mercury." 75 Fed. Reg. at 31904. EPA further explains in the area source MACT floor memorandum that:

EPA estimates that they have subjected to regulation or propose to regulate 90.3 percent of the 172.3 tons in the 1990 emissions inventory for mercury. Coal-fired area source boilers would provide an additional 0.72 percent. Regulation of these boilers under MACT would provide an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met. Area Source MACT Floor Memorandum at 2.

Neither the proposed rule nor the MACT floor memorandum provide data that support the proposed determination that 90.3 percent of the 1990 emissions inventory for mercury is subject

to regulation. EPA simply makes this conclusory assertion that is unsupported by facts or relevant information. As a result, any final action based on this assertion is invalid for failure to provide adequate record support.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Gary Rubenstein

Commenter Affiliation: Kauai Island Utility Cooperative, KIUC

Document Control Number: EPA-HQ-OAR-2006-0790-2028.1

Comment Excerpt Number: 1

Comment: We believe EPA must conduct the same level of review for POM as was provided for mercury in determining whether POM from boiler area sources warrants regulation under 112(c)(6). While the exact method of determining the area source percentages of mercury emissions from coal-fired boilers (4.3%) and non-coal fired boilers (0.34%) cited in the preamble is not substantiated in the rulemaking materials, a similar calculation for POM may be conducted using the data from the 112(c)(6) inventory.⁶

Specifically, the 112(c)(6) inventory relies on three surrogates for estimating national POM emissions. The first surrogate is the solvent-extractable fraction of particulate matter (EOM), the second is the list of 16 polycyclic aromatic compounds (PAIRs) that have been targeted as part of a suggested procedure for measuring these type of compounds (“16-PAIR”), and the third is a subset of 7 of the 16 PAIRs that the International Agency for Research on Cancer has determined to be animal carcinogens (“7-PAIR”). The 112(c)(6) inventory contains the 1990 national totals for all three POM surrogates by source category. Additionally, the 112(c)(6) inventory apportions emissions from each source category to either major sources or area sources.⁷

EPA states that the proposed regulation of POM emissions from oil-fired boilers that are area sources under 112(c)(6) is the result of the source category listing pursuant to 112(c)(6) of “commercial oil combustion,” “industrial oil combustion,” “industrial waste oil combustion,” and “utility oil combustion.” In response, we summed the area source emissions of each POM surrogate to determine the contribution of POM from area sources (covered under the Proposed Rule) towards the inventory total. [See submittal for data table provided by commenter showing the total emissions of each POM surrogate from the affected source.]

We may conclude that commercial and industrial oil combustion from area sources contributes between 0.02% and 0.34% of the 112(c)(6) inventory of POM, depending on the surrogate. This contribution is less than or equal to the mercury contribution of oil and biomass-fired boilers that are areas sources, which EPA determined did not warrant regulation under 112(c)(6). Therefore, the rulemaking should justify why POM emissions from area source boilers must be regulated under 112(c)(6) when EPA determined that the same (or higher) contribution of mercury emissions could be excluded from regulation under 112(c)(6) and regulated under 112(c)(3)

using the GACT option. We believe that there is no justification for this decision and that the latter regulatory option of GACT for oil-fired area source boilers should have been selected.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Christian Richter and Jeff Hannapel

Commenter Affiliation: American Foundry Society

Document Control Number: EPA-HQ-OAR-2006-0790-1857.2

Comment Excerpt Number: 2

Comment: EPA's proposed Boiler GACT is flawed because the Agency provides no basis for its assertion that mercury (Hg) and polycyclic organic matter (POM) must be regulated under this standard in order to satisfy the requirement that 90 percent of nationwide emissions of these pollutants must be regulated under Clean Air Act (CAA) section 112 standards. In 1998 when EPA published the list of source categories that must be regulated to meet the 90 percent control requirement of section 112 (c)(6) of the CAA, the Agency did not specifically conclude that area source categories needed to be regulated. Instead, EPA explained that it "will determine whether specific regulation of the area source component of a source category is appropriate, or necessary to meet the 90 percent goal, based on more source category-specific data collected as part of the regulatory process." 63 Fed. Reg. 17838, 17842 (April 10, 1998).

With regard to POM, the proposed Boiler GACT and supporting documentation provides no such additional analysis justifying the need to regulate area source POM emissions pursuant to section 112(c)(6) of the CAA. The preamble simply asserts, with no further analysis or supporting information, that "[w]e continue to believe that we must regulate POM from coal-fired, biomass-fired, and oil-fired area source boilers in order to meet the requirement in section 112(c)(6)." 75 Fed. Reg. at 31904. Without specific justification for regulating area source categories, EPA's conclusory assertion does not provide a rational basis or adequate factual justification to support the proposed determination that area source industrial boilers must be regulated to satisfy the 90 percent requirement of section 112(c)(6) of the CAA.

Similarly, with regard to Hg the preamble to the proposed Boiler GACT states that "based on the information we have learned to date as we are developing standards for various source categories, such as major source boilers, gold mines, commercial and industrial solid waste incinerators, and other categories, we believe that we only need coal-fired area source boilers to meet the 90 percent requirement set forth in section 112(c)(6) for mercury." 75 Fed. Reg. at 31904. EPA further explains in the area source MACT floor memorandum that:

EPA estimates that they have subjected to regulation or propose to regulate 90.3 percent of the 172.3 tons in the 1990 emissions inventory for mercury. Coal-fired area source boilers would provide an additional 0.72 percent. Regulation of these boilers under MACT would provide an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met. Area Source MACT Floor Memorandum at 2.

Neither the proposed rule nor the MACT floor memorandum provide data that support the proposed determination that 90.3 percent of the 1990 emissions inventory for mercury is subject to regulation. EPA simply makes this conclusory assertion that is unsupported by facts or relevant information. As a result, any final action based on this assertion is invalid for failure to provide adequate record support.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Cindy Domenico

Commenter Affiliation: Boulder County Commissioners

Document Control Number: EPA-HQ-OAR-2006-0790-1652.1

Comment Excerpt Number: 2

Comment: Boulder County supports the new HAP emission standards with the exception of the Particulate Matter (PM) limit of .03 lbs/BTU limit, based on Maximum Achievable Control Technology (MACT) for all new boilers, regardless of size.

Boulder County recommends that the standard for new biomass boilers 5MMBtu or less in size be subject to the "Work practice standard/management practice" and boilers greater than 5MMBtu be subject to the MACT standards. Considering that biomass boiler installations will primarily be located in rural areas, close to the fuel source and within smaller buildings, this revision will allow small commercial and institutional entities to take advantage of this renewable energy source to heat their buildings cost effectively in an environmentally sustainable way. It would also enable us to make more productive use of biomass rather than burning it in open fires.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jeffery S. Hannapel

Commenter Affiliation: National Association for Surface Finishing

Document Control Number: EPA-HQ-OAR-2006-0790-1840.1

Comment Excerpt Number: 2

Comment: Section 112(d)(5) of the CAA authorizes EPA to set standards for area sources using "generally available control technologies or management practices" (i.e., GACT) rather than "MACT." Section 112(d)(5) establishes a special rule for area source standards: "[w]ith respect to categories and subcategories of area sources . . . the Administrator may . . . elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such

sources.” In other words, EPA may establish GACT standards for area sources rather than MACT standards pursuant to section 112(d).

EPA takes the position in the proposal that it cannot use GACT to regulate HAP emissions from area source categories that are subject to section 112(c)(6). This position suffers from two fundamental flaws. The first problem is that it ignores Agency’s statutory authority to use GACT. Section 112(d)(5) expressly states that EPA is authorized to use GACT “[w]ith respect to categories and subcategories of area sources listed pursuant to [§ 112(c)].”

The CAA provides only two ways for EPA to list an area source category for purposes of regulating HAP emissions from the category with MACT standards. First, EPA may use the MACT standard for an area source category that presents a threat of adverse effects to human health or the environment ... warranting regulation under this section.” Second, EPA may adopt MACT standards for an area source category to meet the specified aggregate control requirement for the seven listed HAPs. In this proposed rule, EPA has not provided adequate support in the administrative record to justify the use of MACT standards for area source boilers.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Gary Rubenstein

Commenter Affiliation: Kauai Island Utility Cooperative, KIUC

Document Control Number: EPA-HQ-OAR-2006-0790-2028.1

Comment Excerpt Number: 4

Comment: With regard to HAP reductions, the RIA states:

Due to data, resource, and methodology limitations, we were unable to estimate the benefits associated with the thousands tons of hazardous air pollutants that would be reduced as a result of this rule.¹¹

However, these are precisely the benefits that must be quantified in order to justify the level of control of the Proposed Rule. Following this admission, the RIA lists the Top “HAPs by Mass from Boilers by Fuel Type” in Table 6-6. For oil-fired boilers, the only two HAPs listed are nickel and manganese, yet the regulatory proposal is requiring MACT for POM emissions. Interestingly, although Table 6-6 lists POM emissions (as PAH) as one of the top HAPs emitted by gas-fired boilers, gas-fired boilers are exempted from the current regulatory proposal.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Matthew Todd and David Friedman

Commenter Affiliation: American Petroleum Institute (API) and National Petrochemical and Refiners Association (NPRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2025.1

Comment Excerpt Number: 4

Comment: This proposal seems to have an inconsistency in the area of MACT versus GACT standards. On page 31898 of the preamble, EPA states the following.

The CAA section 112(c)(6) list of source categories currently includes industrial coal combustion, industrial oil combustion, industrial wood combustion, commercial coal combustion, commercial oil combustion, and commercial wood combustion. See 63 FR 17849. We listed these source categories under CAA section 112(c)(6) based on the source categories' contribution of mercury and polycyclic organic matter (POM). In the documentation for the CAA section 112(c)(6) listing, the commercial fuel combustion categories included institutional fuel combustion (see „,„1990 Emissions Inventory of Section 112(c)(6) Pollutants, Final Report,?? April 1998). As discussed in greater detail below, we re-examine the emission inventory and the need to address categories under CAA section 112(c)(6) during the rule development process. Based on this reexamination, we now believe we will only need to address the coal-fueled portion of these categories under CAA section 112(c)(6). [Emphasis added]

Yet, the Agency then proceeds to set the emission limits for POM for liquid-fired boilers under the MACT procedure rather than the GACT procedure. In Table 2 of the preamble, EPA assesses the impact of the proposal. For POM, the HAP driving the CO emission limit, EPA estimates 9.22 Tons of reduction with 3.5 Tons coming from liquid-fired units. However, the footnote for the POM column states “POM is represented by total emissions of polycyclic aromatic hydrocarbons (7-PAH). It is assumed that compliance with work practice standard and management practice will reduce fuel usage by 1 percent, which may reduce emissions of 7-PAH by an equivalent amount.” Thus, the Agency does not appear to have identified any POM reduction from establishing a CO emission limit for POM from liquid-fired boilers under the MACT procedure, but only from the work practice procedures. If there is no POM reduction from establishing MACT, it is clear that regulation of the oil subcategory is not needed to achieve the goal of §112(c)(6) and the Agency should regulate these boilers under GACT, if they are regulated at all, and not MACT.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Gary Rubenstein

Commenter Affiliation: Kauai Island Utility Cooperative, KIUC

Document Control Number: EPA-HQ-OAR-2006-0790-2028.1

Comment Excerpt Number: 5

Comment: While the probable carcinogenicity of the identified PAHs and the potential effects of PAHs on pregnant women warrant concern, the RIA must establish a nexus between the proposed regulation and a reduction in these impacts. Until such a nexus can be established, the costs of requiring MACT for POM emission from oil-fired boilers that are area sources cannot be

justified. For this source subcategory, we recommend that EPA alternatively require GACT pursuant to Section 112(c)(3).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 6

Comment: EPA is authorized to set GACT Standards for POM and Hg. However, we believe EPA has erred in its decision to impose MACT standards and use MACT based analyses to set GACT limits. We believe this legal error requires that the agency return to the GACT analysis referenced in the proposal[MACT Floor Analysis for the Industrial, Commercial, Institutional Boilers National Emission Standards for Hazardous Air Pollutants – Area Source; Memorandum from Amanda Singleton, ERG to Jim Eddinger, EPA; April 2010. EPA-HQ-OAR-2006-0790-0049] and develop a regulation based on the clear conclusions of that analysis and its implications. Several specific recommendations follow below.

Section 112(c)(6) of the CAA identifies seven specific HAPs and requires EPA to “list categories and subcategories of sources assuring that sources accounting for not less than 90 per centum of the aggregate emissions of each such pollutant are subject to standards under subsection (d)(2) or (d)(4).” In 1998, EPA published a notice identifying the source categories that would need to be regulated to satisfy § 112(c)(6). 63 Fed. Reg. 17838 (Apr. 10, 1998). EPA did not distinguish between area sources and major sources in the notice. With regard to area sources, the Agency explained that it “will determine whether specific regulation of the area source component of a source category is appropriate, or necessary to meet the 90 percent goal, based on more source category-specific data collected as part of the regulatory process.” Id. at 17842.

In the Industrial Boiler GACT proposal, EPA explains that, “The CAA section 112(c)(6) list of source categories currently includes industrial coal combustion, industrial oil combustion, industrial wood combustion, commercial coal combustion, commercial oil combustion, and commercial wood combustion. Based on further analysis performed in conjunction with the proposal, however, EPA concludes that it only “must regulate POM from coal-fired, biomass-fired, and oil-fired area source boilers” and that it “only need[s] coal-fired area source boilers to meet the 90 percent requirement set forth in section 112(c)(6) for mercury. EPA believes that it must develop MACT standards for these pollutants and subcategories because § 112(c)(6) requires standards “under section 112(d)(2) or 112(d)(4).

EPA’s proposal to impose MACT standards on Hg emissions from coal-fired area source boilers and POM emissions from coal-fired, biomass-fired, and oil-fired area source boilers is unfounded legally because EPA has discretion to impose GACT standards for these pollutants and subcategories. The Agency’s failure to acknowledge this discretion renders its legal

justification per se arbitrary and capricious and not in accord with the law. *Prill v. NLRB*, 755 F.2d 941, __ (D.C. Cir. 1985) (“[A]n agency regulation must be declared invalid, even though the agency might be able to adopt the regulation in the exercise of its discretion, if it “was not based on the [agency’s] own judgment but rather on the unjustified assumption that it was Congress’ judgment that such [a regulation is] desirable.” *FCC v. RCA Communications, Inc.*, 346 U.S. 86, 96, 73 S.Ct. 998, 1005, 97 L.Ed. 1470 (1953).”).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Robert L. Garfield

Commenter Affiliation: Food Industry Environmental Council

Document Control Number: EPA-HQ-OAR-2006-0790-1835.1

Comment Excerpt Number: 6

Comment: EPA should, however, take the necessary next step and extend the work practice approach to all gas-fired units. Despite the exceedingly strict emissions limits that are proposed, EPA has not identified a demonstrated path to compliance for the remaining gas-fired units for which EPA has not proposed to make work practices available. .

Rather than imposing undue and unrealistic costs and standards on these remaining gas-fired boilers, EPA should allow work practices rather than require emissions limitations.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 7

Comment: EPA’s MACT proposal for the § 112(c)(6) pollutants is flawed because the Agency provides no basis for its assertion that Hg and POM must be regulated under this standard in order to satisfy the requirement that 90% of nationwide emissions of these pollutants must be regulated under § 112 standards. In 1998, when EPA published the list of source categories that must be regulated to meet the § 112(c)(6) 90% control requirement, the Agency did not draw firm conclusions as to whether any area source categories needed to be regulated. Instead, EPA explained that it “will determine whether specific regulation of the area source component of a source category is appropriate, or necessary to meet the 90 percent goal, based on more source category-specific data collected as part of the regulatory process.”[63 Fed. Reg. 17838, 17842 (Apr. 10, 1998).]

With regard to POM, the proposed Industrial Boiler GACT and supporting documentation provides no such additional analysis justifying the need to regulate area source POM emissions to satisfy § 112(c)(6). The preamble[75 Fed. Reg. at 31904] simply asserts, that “[w]e continue to believe that we must regulate POM from coal-fired, biomass-fired, and oil-fired area source boilers in order to meet the requirement in section 112(c)(6).” No further analysis or supporting information is provided. In light of the failure of the 1998 notice to provide justification for regulating area source categories, this conclusory assertion does not provide a rational basis or adequate factual justification to support the proposed determination that area source industrial boilers must be regulated to satisfy the § 112(c)(6) 90% requirement.

Similarly, with regard to Hg, the preamble to the area source proposal states that “based on the information we have learned to date as we are developing standards for various source categories, such as major source boilers, gold mines, commercial and industrial solid waste incinerators, and other categories, we believe that we only need coal-fired area source boilers to meet the 90 percent requirement set forth in section 112(c)(6) for mercury.”[75 Fed. Reg. at 31904] The area source MACT floor memo further explains that:

EPA estimates that they have subjected to regulation or propose to regulate 90.3% of the 172.3 tons in the 1990 emissions inventory for mercury. Coal-fired area source boilers would provide an additional 0.72 percent. Regulation of these boilers under MACT would provide an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met.²¹

To begin, neither the proposed rule nor the MACT floor memo provide the data that support the proposed determination that 90.3 percent of the 1990 emissions inventory for mercury is already subject to regulation. The proposed rule simply makes a conclusory assertion that is unsupported by facts or relevant information, which renders any final action based on this assertion invalid for failure to provide adequate record support.

Moreover, assuming for the sake of argument that the analysis is correct and adequately supported, § 112(c)(6) does not obligate EPA to regulate in order to provide “an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met.” EPA has either exceeded the 90% standard or not. When the facts show that the 90% standard is met, EPA has satisfied its § 112(c)(6) obligation. When the facts are not sufficient for EPA to reliably draw conclusions, EPA’s obligation is to seek the additional information necessary to determine whether additional regulations are needed to meet the 90% standard. EPA’s obligation to provide record support for its regulatory decisions is turned on its head by the assertion that the lack of facts or uncertainty as to the available information justifies additional regulation under § 112(c)(6).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 8

Comment: As noted above, § 112(c)(6) specifies that “standards under subsection (d)(2) or (d)(4)” must be established for the HAP emissions that EPA determines must be regulated to satisfy the aggregate control requirement. Section 112(d)(2) outlines the basic standard setting methodology for § 112 HAP emissions standards, requiring “the maximum degree of reduction in emissions of the hazardous air pollutants subject to this section” – i.e., “MACT.” Section 112(d)(3) generally requires “MACT” to be no less stringent than the emissions limitation achieved by the better performing sources in the given source category (for existing sources) or the best controlled similar source (for new sources). With regard to “threshold pollutants,” § 112(d)(4) authorizes EPA to forego that formulaic MACT approach and, instead, consider the “threshold level, with an ample margin of safety, when establishing standards” under § 112(d).

Section 112(d)(5) establishes a special rule for area source standards. It provides, “With respect to categories and subcategories of area sources listed pursuant to [§ 112(c)], the Administrator may, in lieu of the authorities provided in [§ 112(d)] ... elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources.” In other words, EPA may establish “GACT” standards for area sources rather than “MACT” standards under § 112(d). The statute does not define a method for establishing GACT standards. EPA construes this authority as providing more flexibility than the MACT standard setting process – perhaps most importantly, EPA has concluded that it “can consider costs and economic impacts in determining GACT.

When setting area source standards for § 112(c)(6) pollutants, EPA has interpreted the requirement to set “standards under subsection (d)(2) or (d)(4)” as requiring MACT (or an alternative health-based standard) to be set for the pollutants. EPA has asserted that the specific reference to §§ 112(d)(2) and (d)(4) prevents the Agency from using the GACT authority that is otherwise available under § 112(d)(5). See, e.g., 72 Fed. Reg. 53814, 53815-53816 (Sept. 20, 2007). And, because cost cannot be considered in the first instance in determining MACT, this interpretation stands to cause certain the area source standards for § 112(c)(6) pollutants to be more stringent than they otherwise might be if GACT could be applied.

EPA’s position that it cannot use GACT to regulate HAP emissions from area source categories that are subject to § 112(c)(6) suffers from two fundamental flaws. The first problem is that it ignores the language in § 112(d)(5) that defines the scope of the Agency’s authority to use GACT. Section 112(d)(5) expressly states that EPA is authorized to use GACT “[w]ith respect to categories and subcategories of area sources listed pursuant to [§ 112(c)].”

The CAA provides only two ways for EPA to list an area source category for purposes of regulating HAP emissions from the category under § 112. First, § 112(c)(3) – which is aptly entitled “Area Sources” – provides that EPA “shall list” area source categories “which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section.” Second, as explained in detail above, § 112(c)(6)

authorizes EPA to “list categories and subcategories of sources” – including area sources – as necessary to meet the specified aggregate control requirement for the seven listed HAPs.

Since all area source categories – including those listed under § 112(c)(6) – are listed “pursuant to § 112(c),” EPA has authority under the express terms of § 112(d)(5) to use GACT in regulating area source categories listed and regulated under to § 112(c)(6).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 9

Comment: The problem with EPA’s position is that it ignores the language in § 112(d)(5) authorizing EPA to use the GACT method “in lieu of” the § 112(d)(2) MACT procedure. EPA itself has observed that the term “in lieu of” is commonly understood to mean “in place thereof” and, thus, has correctly concluded that, “CAA section 112(d)(5) authorizes EPA to promulgate standards under CAA section 112(d)(5) that provide for the use of generally available control technologies or management practices (GACT), instead of issuing MACT standards pursuant to CAA section 112(d)(2) and (d)(3).” 73 Fed. Reg. at 1920-1921. In short, the statute plainly says that the requirement to set a standard under § 112(d)(2) can be satisfied by using the alternative GACT procedure specified in § 112(d)(5). As a result, setting GACT under § 112(d)(5) meets the §112(c)(6) requirement to regulate under § 112(d)(2).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 10

Comment: Although EPA’s has not provided a full explanation of its reasoning in the Industrial Boiler GACT proposal or in any of the prior § 112(c)(6) area source standards, it seems apparent that the Agency is concerned that the express reference in § 112(c)(6) to standards under §§ 112(d)(2) and (d)(4) would not have meaning unless it were construed as an unavoidable obligation to set MACT (or a health based standard) for the § 112(c)(6) pollutants. In other words, the reference to §§ 112(d)(2) and (d)(4) might be “mere surplusage” if it were construed as simply reiterating the standard-setting obligation that otherwise already exists for listed area source categories under § 112.

However, there are other rational explanations for this language that avoid the problems with EPA's interpretation that are described above. In particular, the requirement to regulate under § 112(d)(2) or § 112(d)(4) could be interpreted as an obligation for EPA to establish pollutant specific standards for each of the seven HAPs listed in § 112(d)(6). Congress itself provided that EPA must regulate close to 200 individual HAPs. It is reasonable to assume that Congress recognized that, of practical necessity, EPA likely would resort to the use of pollutant categories or surrogate indicators when setting § 112 standards. In this context, it would have been wholly appropriate for Congress to emphasize the need for pollutant-specific standards to assure that specific and appropriate standards were developed for seven of the most problematic HAPs. Support for this interpretation is found in § 129(a)(4), where Congress insisted that EPA "specify numerical emissions limitations" for a specific list of pollutants emitted by waste incinerators. This is a clear signal that Congress assigned a certain greater benefit to pollutant-specific emissions standards.

EPA should implement "GACT" instead of "MACT" in all cases where GACT is authorized. CAA § 112(d)(5) authorizes EPA in most cases to set standards for area sources using "generally available control technologies or management practices" (i.e., "GACT") rather than "MACT." This provision offers two distinct advantages. First, GACT is not defined, which means that EPA has significant discretion in determining what constitutes GACT and, in any event, is not tied to the formulaic MACT floor setting processes under §§ 112(d)(2) and (3). Second, § 112(f)(5) specifies that EPA is not required to conduct a residual risk review of sources covered by a GACT standard. Even where the Agency must establish MACT for certain area source pollutants (as specified in § 112(c)(6)), the sheer number and diversity of sources in certain area sources categories, such as industrial boilers, justify a finding by EPA that management or work practice standards under § 112(h) are appropriate and justified. EPA has made similar decisions in other NESHAP. Examples of other NESHAP include Acrylic and Modacrylic Fibers Production, Carbon Black Production, Chemical Manufacturing: Chromium Compounds, Flexible Polyurethane Foam Production and Fabrication, Lead Acid Battery Manufacturing and Wood Preserving. [FR 72:135:38864, plus 6 other Area Source Rules (See: <http://www.epa.gov/ttn/atw/area/arearules.html>)]

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 11

Comment: As noted above, AF&PA does not believe EPA has justified the regulation of POM from biomass or oil area source boilers statutorily. Importantly, we believe just as strongly that EPA has not provided a sufficient analytical record to show that POM emissions from these sources have sufficient impact to require MACT level [§112(d)(4)] regulation. The data in the

supporting documentation for the proposed Area Source rule is simply insufficient to justify the need to regulate area source POM emissions to satisfy the ‘90%’ control requirement under § 112(c)(6). The supporting documents in fact tell a completely different story – that oil and biomass area source POM contributions are miniscule. The conclusion of our evaluation clearly points to is that EPA needs to proceed with a GACT based management or work practice standard.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 13

Comment: Each of the wood combustion sources are further broken down into major sources and area sources in the report. Significantly, these two wood based area sources combined for only 0.05% and 0.16% of the national emissions for 7-PAH and 16-PAH, respectively. The oil sources are also broken down into major and area sources. These two area sources are similarly low, combining for only 0.001% and 0.22% of the national emissions for 7-PAH and 16-PAH, respectively. A table extracted from the report breaking down the contributions from major and area wood combustion and oil sources is provided in Appendix 1 of the submittal to these comments. Obviously, the contribution to the national inventory for PAH compounds, the best inventory surrogate identified by the report, from both wood (biomass) and oil sources is miniscule.

Clearly, at fractions of a percent of the national emissions, POM from area source biomass and oil fired boilers do not justify a full blown MACT regulatory approach to achieve reasonable emission reductions. AF&PAAF&PA believes that both for statutory reasons and analytical reasons, the miniscule amounts of POM from biomass and oil sources argue for a GACT approach to regulating this pollutant from these sources and, further, that GACT be a management or work practice approach to reducing POM emissions from these sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 14

Comment: Recent animal studies indicate that the emissions from wood combustion sources, the primary component of biomass emissions regulated under this proposal, may have diminished impact relative to other combustion sources.

The high efficiency biomass boilers at issue in this standard burn with sufficient time, temperature, and turbulence to render most particulate emissions into low toxicity inorganic salts and dramatically reduce the POM emissions. These emissions stand in contrast to the PM emissions from diesel combustion and/or inefficient wood combustion which can be dominated by POM. EPA broadly assumes in the proposal that emissions from biomass boilers are highly toxic because they contain a significant POM component. However, recent research indicates that the emissions from high-efficiency biomass combustion are five times less toxic to cells than the emissions from petroleum based emissions. [see submittal for references.]

In addition, control of HAP from biomass sources may not impact urban targets. In addition to § 112(c)(6) requirements for POM control, another rationale for area source GACT is to control specific HAP, like POM, to meet the requirements of Section 112(k) to protect urban environments. However, most of the biomass-fueled combustion emission sources can be shown to be in rural areas. AF&PA believes that a thorough modeling exercise would show that the impacts that Area Source biomass boilers have on the target urban emissions is minimal generally, as noted above, and even less for urban environments. We reference a map of biomass energy boilers published by the Biomass Power Association. [http://www.usabiomass.org/docs/USA%20Biomass%20National%20Map%2010_01_09.pdf] We believe EPA must compare the location of these sources' emissions and compare it with truly urban impacts based on Census Department Maps.[<http://www.census.gov/geo/www/maps/ua2kmaps.htm>.] AF&PA would be happy to work with EPA's modeling experts to evaluate and confirm these very specific impacts.

We believe the information presented in the studies cited should reinforce our primary recommendation to EPA: that GACT, not MACT, is the correct approach to regulating this source and, further, that GACT be a management or work practice to minimize POM emissions from these sources. EPA can meet its deadlines for promulgating a rule while it initiates further research into the health effects issues raised by this comment.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jeffery S. Hannapel

Commenter Affiliation: National Association for Surface Finishing

Document Control Number: EPA-HQ-OAR-2006-0790-1840.1

Comment Excerpt Number: 15

Comment: EPA has ample authority and justification to establish work practice standards instead of numeric emissions limitations for boilers covered by this rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 30

Comment: For the reasons stated above, AF&PA has concluded that EPA does not have the statutory obligation and has not demonstrated the need to proceed with a traditional §112(d)(2)-(4) MACT based numerical limit for new or existing sources with this rule. Particularly because it has not developed the analytical and database support, EPA must proceed with a GACT standard and base it on work practices instead of emission limits. EPA acknowledges in the preamble that the state of New Jersey requires facilities to operate their boilers per the manufacturer's specifications instead of setting numerical CO emission limits[75 FR 31906]. We believe that this is a much more appropriate approach. The requirements for ongoing monitoring, recordkeeping, and stack testing are extensive. Many small sources, in particular, do not have the resources to undertake this additional burden. For many medium to large sources, the additional burden would discourage them from using biomass fuels. We recommend that the management or work practices include good combustion practices, annual tune ups for the boiler, and annual inspections on any pollution control equipment installed to reduce PM or other pollutants as currently required by state and local permit authorities. Management or work practices will vary based on boiler design and boiler manufacturer but are generally documented by manufacturers and/or can be documented and provided by accredited professional engineering companies.

For the reasons stated above, we believe that EPA has not justified the need to impose numeric emissions limitations on area source industrial boilers and that ample authority and justification exists for establishing management or work practice standards for all area source boilers under the GACT procedures outlined in §112(c)(5). If the Agency decides, nevertheless, to finalize numeric emissions limits, the proposed standards are not supported by the available data and would have to be substantially revised. Several important steps would be needed. An option that could be considered would be to adopt management or work practice controls immediately under the GACT provisions. As determined necessary and appropriate, EPA could later consider revising the GACT standard to possibly include numeric emissions limitations.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Matthew Todd and David Friedman

Commenter Affiliation: American Petroleum Institute (API) and National Petrochemical and Refiners Association (NPRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2025.1

Comment Excerpt Number: 42

Comment: EPA proposes a specific tune-up work practice as MACT for liquid-fired boilers below 10 MMBTU/hr design heat input to satisfy the §112(c)(6) requirements relative to POM for this subcategory. It does not appear that regulation of liquid-fired boilers is needed to meet §112(c)(6) requirements, much less regulation of very small liquid-fired boilers. In fact, it is likely the proposed requirements, including the tune-up requirement, would lead to increased POM emission rather than less. Nonetheless, we have the following comments on the proposed tune-up requirements.

Boiler inspections aimed at optimizing combustion are typical for many boilers and thus may represent MACT, on the basis that it is infeasible to set an emission limit and therefore §112(h) applies. EPA concluded the proposed §112 work practice reflects what the top 6% of boilers are already doing. However, the proposal goes beyond typical boiler inspections that are claimed as the basis for the MACT floor decision by requiring CO to be minimized. The Agency should remove the elements of the proposal that are additional and therefore do not represent MACT. If it wishes to require work practice elements that are not represented by the floor, such as requiring CO to be minimized, the Agency should evaluate them as “beyond-the-floor” items and consider cost and feasibility. We believe such an analysis would show that the proposed CO-related measurement elements of the proposed tune-up are not justified for area sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Hank Russell

Commenter Affiliation: Cuolumne County Economic Development Authority

Document Control Number: EPA-HQ-OAR-2006-0790-1658.1

Comment Excerpt Number: 3

Comment: We respectfully request that all biomass-related portions of the rule be omitted and/or a new section, specific to non fossil-fuel be developed. The new section may utilize some of the ERG MACT Floor Analysis referenced in the rule; however, should be supplemented to consider each boiler on a case by case basis, rather than a HAP by HAP basis, and to include data from at least 75% of all boilers. This could be done as a mandatory reporting (potentially electronic) through the current EPA Title V Program or the Electronic Reporting Tool (ERT) reference in the rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Mark Denzler

Commenter Affiliation: Illinois Manufacturers' Association

Document Control Number: EPA-HQ-OAR-2006-0790-2004

Comment Excerpt Number: 1

Comment: We support EPA's proposal to rely on work practice standards in lieu of emission limits for certain gas-fired boilers. This approach would still produce significant emissions reduction benefits while helping to minimize the capital cost of emissions controls. However, EPA should extend the work practice approach to all gas-fired units. EPA has not identified a practical cost effective method of compliance for the remaining gas-fired units and should instead allow work practices rather than require that such units meet the burdensome emissions limitations that have been proposed.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Sarah E. Amick

Commenter Affiliation: Rubber Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1918.1

Comment Excerpt Number: 1

Comment: RMA tire members operate 38 area source boilers at 16 tire manufacturing facilities in 11 states.(Alabama, Arizona, Georgia, Illinois, Iowa, Mississippi, New York, North Carolina, South Carolina, Tennessee, and Virginia) These boilers range in size from 2 MMBtu/hr to 120 MMBtu/hr, and combust either natural gas or a combination of natural gas and liquid fuel oils. Boilers classified as oil fuel boilers include "any boiler that does not burn solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels."⁴ We recommend that EPA establish work practice for all oil fuel, area source boilers

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: John Huber

Commenter Affiliation: National Oilheat Research Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1831.1

Comment Excerpt Number: 1

Comment: Therefore, it is imperative that both existing and new major and area source liquid-fueled boilers between 3 and 10 MMBTU capacity be subject to a work practice consisting of a bi-annual boiler tune-up for compliance.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jim Simon
Commenter Affiliation: American Sugar Cane League
Document Control Number: EPA-HQ-OAR-2006-0790-2281.1
Comment Excerpt Number: 2

Comment: Bagasse Combustion is NOT a Listed Source Category Under Section 112(c)(6).

To the extent that the Proposed Rule regulates POM emissions from bagasse combustion pursuant to CAA §112(c)(6), it is promulgated in excess of statutory authority.

Section 112(c)(6) of the CAA provides for the listing of categories and subcategories of POM sources so that 90 percent of the emissions of POM are subject to MACT (Maximum Achievable Control Technology) standards. As discussed in more detail in Section II.B of these comments, bagasse-fired boilers are negligible emitters of POM and should not be subject to regulation as such.

EPA has never listed bagasse-fired boilers as a source of POM emissions pursuant to §112(c)(6). Under fuel combustion, EPA listed industrial, institutional, and commercial boilers as source categories. See, 63 Fed. Reg. 7159 (February 12, 1998). When providing a list of source subcategories for regulation under subsections 112(d)(2) and (d)(4), pursuant to §112(c)(6), EPA identified commercial and industrial natural gas, coal, oil, and wood/wood residue combustion. 63 Fed. Reg. 17847-17850 (April 10, 1998). Section §112(c)(6) sources (i.e., the commercial and industrial natural gas, coal, oil, and wood/wood residue combustion sources) were “selected on the basis of whether they emit the seven listed HAP.” 63 Fed. Reg. 17841 (April 10, 1998). These sources were included because they were the “only ... sources that EPA believes are appropriate for regulation under section 112.” 63 Fed. Reg. 17845 (April 10, 1998).

Nevertheless, in this rulemaking, EPA subjects sources beyond commercial and industrial natural gas, coal, oil, and wood/wood residue combustion sources to regulation. In the preamble to the Proposed Rule, EPA identifies only coal, oil, and wood combustion as contributors of POM pursuant to §112(c)(6) and states that the proposed standards reflect the application MACT for POM from all area source boilers under §112(c)(6). 75 Fed. Reg. 31898 and 31899 (June 4, 2010). EPA then proceeds, inappropriately, to regulate all biomass-fired boilers.

Because wood products, wood residue and bagasse are included in the proposed definition of “biomass,” the ASCL can only assume that EPA has drawn the incorrect and unsupported conclusion that the term “wood/wood residue” is synonymous with “biomass.” As illustrated in the following section, POM and 7-PAH emissions from the combustion of wood are not representative of all biomass combustion, and are vastly different from the combustion of bagasse.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Mark Denzler

Commenter Affiliation: Illinois Manufacturers' Association

Document Control Number: EPA-HQ-OAR-2006-0790-2004

Comment Excerpt Number: 2

Comment: EPA should also establish annual tune-up work practice as the MACT standard for biomass boilers. The numerical limitations EPA proposes will have a severe economic impact on industry sectors where biomass boilers are widely use, such as the furniture and agricultural products industries. Prescribing work practice standards for biomass boilers in lieu of numeric emissions limitations will produce relatively significant emission reductions without the severe economic burden that would otherwise result.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Katherine Fry

Commenter Affiliation: SierraPine Composite Solutions

Document Control Number: EPA-HQ-OAR-2006-0790-2272

Comment Excerpt Number: 2

Comment: EPA has not justified the need to regulate area source industrial boilers in order to satisfy 112(c)(6).

EPA's Area Source proposal for the 112(c)(6) pollutants is flawed because the Agency provides no basis for its assertion that polycyclic organic matter ("POM") must be regulated under this standard in order to satisfy the requirement that 90% of nationwide emissions of these pollutants must be regulated under 112 standards. In 1998, when EPA published the list of source categories that must be regulated to meet the 112(c)(6) 90% control requirement, the Agency did not draw firm conclusions as to whether any area source categories needed to be regulated. Instead, EPA explained that it "will determine whether specific regulation of the area source component of a source category is appropriate, or necessary to meet the 90 percent goal, based on more source category-specific data collected as part of the regulatory process."

The proposed Industrial Boiler GACT and supporting documentation provides no such additional analysis justifying the need to regulate area source POM emissions to satisfy 112(c)(6). The preamble simply asserts, with no further analysis or supporting information, that "[w]e continue to believe that we must regulate POM from coal-fired, biomass-fired, and oil-fired area source boilers in order to meet the requirement in section 112(c)(6)."

In light of the failure of the 1998 notice to provide justification for regulating area source categories, this conclusory assertion does not provide a rational basis or adequate factual

justification to support the proposed determination that area source industrial boilers must be regulated to satisfy the 112(c)(6) 90% requirement.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Charles R. Faulds

Commenter Affiliation: Texas Electric Cooperatives, Treating Division

Document Control Number: EPA-HQ-OAR-2006-0790-1641.1

Comment Excerpt Number: 2

Comment: EPA established limits for CO, but should focus on ensuring boilers have good combustion practices. The limits for CO for area source biomass boilers were established by including data from boilers too small to be representative of the area source boiler population. EPA should retain a health-based compliance option so that facilities are not required to install unnecessary controls.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Mary Graham

Commenter Affiliation: Charles Metro Chamber of Commerce

Document Control Number: EPA-HQ-OAR-2006-0790-1953.1

Comment Excerpt Number: 3

Comment: The Chamber believes that EPA has not justified the need to impose numeric emissions limitations on area source industrial boilers and that ample authority and justification exists for establishing work practice standards for all area source boilers. If the Agency does decide to finalize numeric emissions limits, the proposed standards are not supported by the available data and would have to be substantially revised.

Even if EPA needed to regulate area source industrial boilers to meet § 112(c)(6), it would not be required to adopt maximum achievable control technology (MACT) standards. CAA § 112(d)(5) authorizes EPA in most cases to set standards for area sources using "generally available control technologies or management practices" (i.e., "GACT") rather than "MACT."

EPA takes the position in the proposal that it cannot use GACT to regulate HAP emissions from area source categories that are subject to § 112(c)(6). This position fails to consider language in § 112(d)(5) that defines the scope of the Agency's authority to use GACT. Section 112(d)(5) expressly states that EPA is authorized to use GACT "[w]ith respect to categories and subcategories of area sources listed pursuant to [§ 112(c)]."

The GACT standard for area source boilers should consist of work practices rather than numeric emissions limitations. EPA is authorized under 112(d)(5) to establish “standards or requirements....which provide for the use of generally available control technologies or management practices.” Periodic tune-up of affected boilers will reduce emissions by improving the combustion efficiency of the boiler and provides a cost effective, through reduced fuel usage, way for area source boilers to demonstrate compliance.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Katherine Fry

Commenter Affiliation: SierraPine Composite Solutions

Document Control Number: EPA-HQ-OAR-2006-0790-2272

Comment Excerpt Number: 3

Comment: Even if EPA needed to regulate area source industrial boilers to meet 112(c)(6), it would not be required to adopt MACT standards.

CAA 112(d)(5) authorizes EPA in most cases to set standards for area sources using "generally available control technologies or management practices" (i.e., "GACT") rather than "MACT." Section 112(d)(5) establishes a special rule for area source standards. It provides, "With respect to categories and subcategories of area sources listed pursuant to [112(c)], the Administrator may, in lieu of the authorities provided in [112(d)] ... elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources." In other words, EPA may establish "GACT" standards for area sources rather than "MACT" standards under 112(d).

EPA takes the position in the proposal that it cannot use GACT to regulate HAP emissions from area source categories that are subject to 112(c)(6). This position suffers from two fundamental flaws. The first problem is that it ignores the language in 112(d)(5) that defines the scope of the Agency's authority to use GACT. Section 112(d)(5) expressly states that EPA is authorized to use GACT "[w]ith respect to categories and subcategories of area sources listed pursuant to [112(c)]." The CAA provides only two ways for EPA to list an area source category for purposes of regulating HAP emissions from the category under 112. First, 112(c)(3) — which is aptly entitled "Area Sources" — provides that EPA "shall list" area source categories "which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section." Second, 112(c)(6) authorizes EPA to "list categories and subcategories of sources" — including area sources — as necessary to meet the specified aggregate control requirement for the seven listed HAPs. Since all area source categories — including those listed under 112(c)(6) — are listed "pursuant to 112(c)," EPA has authority under the express terms of 112(d)(5) to use GACT in regulating area source categories listed and regulated under 112(c)(6).

A fundamental problem with EPA's position is that it ignores the language in 112(d)(5) authorizing EPA to use the GACT method "in lieu of the 112(d)(2) MACT procedure. EPA itself

has observed that the term "in lieu of is commonly understood to mean "in place the of" and, thus, has previously correctly concluded that. "CAA section 112(d)(5) authorizes EPA to promulgate standards under CAA section 112(d)(5) that provide for the use of generally available control technologies or management practices (GACT), instead of issuing MACT standards pursuant to CAA section 112(d)(2) and (d)(3)." In short, the statute plainly says that the requirement to set a standard under 112(d)(2) can be satisfied by using the alternative GACT procedure specified in 112(d)(5). As a result, setting GACT under 112(d)(5) meets the 12(c)(6) requirement to regulate under 112(d)(2).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Robert E. McKenna

Commenter Affiliation: Motor and Equipment Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1920.1

Comment Excerpt Number: 3

Comment: While we support EPA's decision to establish work practice standards in lieu of emission limits for certain gas-fired boilers, EPA should provide for work practice standards on all gas-fired units and biomass boilers with this rule. EPA has properly exercised its authority by proposing to rely on work practice standards in lieu of emission limits for certain gas-fired boilers. 75 Fed. Reg. 32025. By doing so, EPA is taking one important step toward making sure that these rules do not unduly harm certain segments of the nation's critical manufacturing base. As EPA recognizes, the capital cost of emissions controls for the numerous existing gas-fired boilers would be extraordinarily high. Id. Further, EPA correctly concluded that imposing emission limitations on gas-fired boilers would create a disincentive for switching to gas from oil, coal or biomass as a control technique. Id. In fact, it could create an incentive for facilities to switch away from gas to other fuels. Both outcomes should be avoided. EPA should, however, take the necessary next step and extend the work practice approach to all gas-fired units. Despite the exceedingly strict emissions limits that are proposed, EPA has not identified a demonstrated path to compliance for the remaining gas-fired units for which EPA has not proposed to make work practices available. Rather than imposing undue and unrealistic costs and standards on these remaining gas-fired boilers, EPA should allow work practices rather than require emissions limitations.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Bill Thomas

Commenter Affiliation: Shuqualak Lumber Company

Document Control Number: EPA-HQ-OAR-2006-0790-1948.1

Comment Excerpt Number: 3

Comment: Shuqualak Lumber Company is committed to operating in an environmentally responsible manner, but we question if the proposed boiler MACT standards are far more stringent than they need be to protect the environment in which we live. Further, it is our understanding that EPA has the legal discretion and technical justification to substantially reduce the burden of this standard while still providing ample protection to health and the environment.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Ronald W. Gore

Commenter Affiliation: Alabama Department of Environmental Management

Document Control Number: EPA-HQ-OAR-2006-0790-1494.1

Comment Excerpt Number: 3

Comment: While the purpose of the MACT regulations is to reduce health impacts from Hazardous Air Pollutants, the "eliminate emissions at any cost" strategy that EPA is utilizing in establishing these MACTs has no correlation to actual health impacts. In fact, with the exception of Hg, HCl, and dioxin/furans, these proposed regulations do not establish limitations on any HAPs but instead draw on generalized correlations to criteria air pollutants for which standards are proposed. In effect, EPA is establishing limitations for pollutants regulated under other sections of the Clean Air Act; limitations which could not be justified otherwise. Therefore, Health Based Compliance Alternatives similar to those included in the prior version of the Agency's boiler MACT should be included. It would likely be determined that many small to moderate size boilers have little to no health-based impacts from their HAP emissions, rendering the addition of costly emissions controls unnecessary.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Heather M. Bartlett

Commenter Affiliation: SLR International Corp, Columbia Forest Products

Document Control Number: EPA-HQ-OAR-2006-0790-1963.1

Comment Excerpt Number: 4

Comment: EPA takes the position in the proposal that it cannot use GACT to regulate HAP emissions from Area Source categories that are subject to § 112(c)(6). This position suffers from two fundamental flaws. The first problem is that it ignores the language in § 112(d)(5) that defines the scope of the Agency's authority to use GACT. Section 112(d)(5) expressly states that EPA is authorized to use GACT "[w]ith respect to categories and subcategories of Area Sources listed pursuant to [§ 112(c)]." The CAA provides only two ways for EPA to list an Area Source category for purposes of regulating HAP emissions from the category under § 112. First, §

112(c)(3) – which is aptly entitled “Area Sources” – provides that EPA “shall list” Area Source categories “which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section.”

Second, § 112(c)(6) authorizes EPA to “list categories and subcategories of sources” – including Area Sources – as necessary to meet the specified aggregate control requirement for the seven listed HAPs. Since all Area Source categories, including those listed under § 112(c)(6) are listed “pursuant to § 112(c),” EPA has authority under the express terms of § 112(d)(5) to use GACT in regulating Area Source categories listed and regulated under § 112(c)(6).

A fundamental problem with EPA’s position is that it ignores the language in § 112(d)(5), authorizing EPA to use the GACT method “in lieu of” the § 112(d)(2) MACT procedure. EPA itself has observed that the term “in lieu of” is commonly understood to denote “in place there of” and, thus, has previously correctly concluded that, “CAA section 112(d)(5) authorizes EPA to promulgate standards under CAA section 112(d)(5) that provide for the use of generally available control technologies or management practices (GACT), instead of issuing MACT standards pursuant to CAA section 112(d)(2) and (d)(3).”¹ In short, the statute plainly states that the requirement to set a standard under § 112(d)(2) can be satisfied by using the alternative GACT procedure specified in § 112(d)(5). As a result, setting GACT under § 112(d)(5) meets the §112(c)(6) requirement to regulate under § 112(d)(2).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Robert E. McKenna

Commenter Affiliation: Motor and Equipment Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1920.1

Comment Excerpt Number: 4

Comment: EPA should also establish annual tune-up work practice as the MACT standard for biomass boilers. For example, in the forest products industry alone, the estimated cost of complying with the proposed hazardous air pollutant (HAP) emissions limitations for biomass boilers is \$3.3 billion. This is an extraordinary cost that, in the context of the forest products industry, equals or exceeds the magnitude of the economic burden that EPA predicts for the Gas 1 subcategory. Similarly severe economic impacts are expected in other industry sectors where biomass boilers are widely use, such as the furniture, sugar, and agricultural products industries. Thus, there is strong economic justification for prescribing work practice standards for biomass boilers in lieu of numeric emissions limitations.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Gary Melow

Commenter Affiliation: Michigan Biomass

Document Control Number: EPA-HQ-OAR-2006-0790-1917.1

Comment Excerpt Number: 5

Comment: We do not believe that EPA has justified the establishment of a CO emission limit for biomass boilers under MACT for the following reasons:

There is no solid correlation of CO to POM emissions in well controlled boilers. While extremely high (>1000 PPM) CO numbers may reflect poor combustion conditions and may result in higher POM emissions, POM emissions do not necessarily decrease with decreased CO in well controlled boilers. We have seen no supporting data to show that an extremely low CO emission limit on biomass boilers will reduce POM emissions from these sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Gary Melow

Commenter Affiliation: Michigan Biomass

Document Control Number: EPA-HQ-OAR-2006-0790-1917.1

Comment Excerpt Number: 6

Comment: Our data for POM emissions indicate that emissions are very small from our facilities that operate at a higher CO level than what is proposed in the standard (our permit limits equal about 250 to 400 PPM CO). We have some benzo(a)pyrene test data that is consistently not detectable for our sources. Viking Energy has test data using biomass and various secondary fuels showing very low POM emissions. This data is contained in the document "Wood Products in the Waste Stream: Characteristics and Emissions" by Environmental Risk Limited (NTIS Publication No. PB93-198950). Our facilities have undergone review at the state level for toxic air contaminants and met all requirements, including ambient air quality demonstrations. We understand that the state of California has completed risk assessments of wood fired power plants and have not found POM to be problematic from these sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Sarah E. Amick

Commenter Affiliation: Rubber Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1918.1

Comment Excerpt Number: 6

Comment: EPA's MACT proposal for the 112(c)(6) pollutants is flawed because the Agency provides no basis for its assertion that mercury (Hg) and polycyclic organic matter (POM) must

be regulated under this standard in order to satisfy the requirement that 90% of nationwide emissions of these pollutants must be regulated under 112 standards. In 1998, when EPA published the list of

source categories that must be regulated to meet the 112(c)(6) 90% control requirement, the Agency did not draw firm conclusions as to whether any area source categories needed to be regulated. Instead, EPA explained that it “will determine whether specific regulation of the area

source component of a source category is appropriate, or necessary to meet the 90 percent goal, based on more source category-specific data collected as part of the regulatory process.”(63 Fed. Reg. 17838)

With regard to POM, the proposed Industrial Boiler GACT and supporting documentation provides no such additional analysis justifying the need to regulate area source POM emissions to satisfy 112(c)(6). The preamble simply asserts, with no further analysis or supporting information, that “[w]e continue to believe that we must regulate POM from coal-fired, biomass-fired, and oil-fired area source boilers in order to meet the requirement in section 112(c)(6).”⁸ In light of the failure of the 1998 notice to provide justification for regulating area source categories, this conclusory assertion does not provide a rational basis or adequate factual justification to support the proposed determination that area source industrial boilers must be regulated to satisfy the 112(c)(6) 90% requirement.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Sarah E. Amick

Commenter Affiliation: Rubber Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1918.1

Comment Excerpt Number: 7

Comment: With regard to Hg, the preamble to the area source proposal states that “based on the information we have learned to date as we are developing standards for various source categories, such as major source boilers, gold mines, commercial and industrial solid waste incinerators, and other categories, we believe that we only need coal-fired area source boilers to meet the 90 percent requirement set forth in section 112(c)(6) for mercury.”⁹ The area source MACT floor memo further explains that:

EPA estimates that they have subjected to regulation or propose to regulate 90.3 percent of the 172.3 tons in the 1990 emissions inventory for mercury. Coal-fired area source boilers would provide an additional 0.72 percent. Regulation of these boilers under MACT would provide an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met.[MACT floor memo].

To begin, neither the proposed rule nor the MACT floor memo provide data that support the proposed determination that 90.3 percent of the 1990 emissions inventory for mercury is subject to regulation. The proposed rule simply makes a conclusory assertion that is unsupported by

facts or relevant information, which renders any final action based on this assertion invalid for failure to provide adequate record support.

Moreover, assuming for the sake of argument that the analysis is correct and adequately supported, 112(c)(6) does not obligate EPA to regulate in order to provide “an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met.” EPA has either exceeded the 90% standard or not. When the facts show that the 90% standard is met, EPA has satisfied its 112(c)(6) obligation. When the facts are not sufficient for EPA to reliably draw conclusions, EPA’s obligation is to seek the additional information necessary to determine whether additional regulations are needed to meet the 90% standard. EPA’s obligation to provide record support for its regulatory decisions is turned on its head by the assertion that the lack of facts or uncertainty as to the available information justifies additional regulation under 112(c)(6).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Gary Melow

Commenter Affiliation: Michigan Biomass

Document Control Number: EPA-HQ-OAR-2006-0790-1917.1

Comment Excerpt Number: 7

Comment: The document cited by EPA to justify the regulation of POM as MACT shows that industrial and commercial wood combustion represents a very small fraction of POM emissions as PAH-7, and there are many, many sources in the category. Therefore, the costs of the rule are high for very little, if any, benefit.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Gary Melow

Commenter Affiliation: Michigan Biomass

Document Control Number: EPA-HQ-OAR-2006-0790-1917.1

Comment Excerpt Number: 8

Comment: The underlying purpose of the regulation of CO as a MACT pollutant is to reduce POM in urban areas. Biomass plants are generally not located in urban areas. Most of our fuel comes from the forest so these facilities tend to be located near in rural, forested regions away from large urban areas. So an already questionable reduction in POM emissions from biomass boilers as a result of this rule will result in even less (if any) reduction in POM emissions in urban areas.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Sarah E. Amick

Commenter Affiliation: Rubber Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1918.1

Comment Excerpt Number: 8

Comment: CAA 112(d)(5) authorizes EPA in most cases to set standards for area sources using “generally available control technologies or management practices” (i.e., “GACT”) rather than “MACT.” Section 112(d)(5) establishes a special rule for area source standards. It provides, “With respect to categories and subcategories of area sources listed pursuant to [112(c)], the Administrator may, in lieu of the authorities provided in [112(d)] ... elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources.” In other words, EPA may establish “GACT” standards for area sources rather than “MACT” standards under 112(d).

EPA takes the position in the proposal that it cannot use GACT to regulate HAP emissions from area source categories that are subject to 112(c)(6). This position suffers from two fundamental flaws. The first problem is that it ignores the language in 112(d)(5) that defines the scope of the Agency’s authority to use GACT. Section 112(d)(5) expressly states that EPA is authorized to use GACT “[w]ith respect to categories and subcategories of area sources listed pursuant to [112(c)].” The CAA provides only two ways for EPA to list an area source category for purposes of regulating HAP emissions from the category under 112. First, 112(c)(3) – which is aptly entitled “Area Sources” – provides that EPA “shall list” area source categories “which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section.”

Second, 112(c)(6) authorizes EPA to “list categories and subcategories of sources” – including area sources – as necessary to meet the specified aggregate control requirement for the seven listed HAPs. Since all area source categories – including those listed under 112(c)(6) – are listed “pursuant to 112(c),” EPA has authority under the express terms of 112(d)(5) to use GACT in regulating area source categories listed and regulated under to 112(c)(6).

A fundamental problem with EPA’s position is that it ignores the language in 112(d)(5) authorizing EPA to use the GACT method “in lieu of” the 112(d)(2) MACT procedure. EPA itself has observed that the term “in lieu of” is commonly understood to mean “in place the of” and, thus, has previously correctly concluded that, “CAA section 112(d)(5) authorizes EPA to promulgate standards under CAA section 112(d)(5) that provide for the use of generally available control technologies or management practices (GACT), instead of issuing MACT standards pursuant to CAA section 112(d)(2) and (d)(3).”[73 Fed. Reg. 1916,1920-1921 (Jan. 10, 2008)]. In short, the statute plainly says that the requirement to set a standard under 112(d)(2) can be satisfied by using the alternative GACT procedure specified in 112(d)(5). As a result, setting GACT under 112(d)(5) meets the 112(c)(6) requirement to regulate under 112(d)(2).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Robert Klemans

Commenter Affiliation: Florida Electric Power Coordinating Group

Document Control Number: EPA-HQ-OAR-2006-0790-1955.1

Comment Excerpt Number: 8

Comment: Exemption for Propane-Fired Area Source Boilers: In the proposed rule, the EPA states the purpose of the IB MACT is to establish “emission standards for control of mercury emissions from biomass-fired and oil-fired area source boilers” Also in the proposed rule, EPA states that natural gas-fired area source boilers do not emit any urban HAPs. Thus EPA has exempted boilers fired by natural gas from the rule’s stated HAP emission standards. FCG believes boilers fired on propane should also be exempted from the rule’s stated HAP emission standards. Under the proposed rule, the natural gas-fired auxiliary boilers are subject to work practice standards requiring an annual tune up. By contrast, the proposed rule requires all non-natural gas-fired auxiliary boilers to comply with stringent emission limits and demonstrate compliance with those limits by following expensive monitoring requirements. The distinction between firing a boiler on natural gas and propane is nominally quantifiable and both meet the 90 percent requirement under section 112(c)(3) for the HAPs identified in the proposed IB MACT rule.

The IB MACT rule sets emission limits for area source boilers for the constituents of particulate matter (PM), mercury and carbon monoxide (CO). AP 42, Fifth Edition, Volume I Chapter 1: External Combustion Sources, Table 1.5-1 Emission Factors for LPG Combustion footnote “a” assumes PM, CO, and TOC emissions from the combustion of propane are the same, on a heat input basis, as for natural gas. The IB MACT proposed rule uses PM as a surrogate for the non-mercury metallic urban HAP (arsenic, beryllium, cadmium, chromium, lead, manganese, and nickel); therefore, there is not distinguishable difference between the emissions of a boiler firing on natural gas or propane. Lastly, EPA has identified emission factors for HAPs and metals from natural gas combustion (Table 1.4-3 and Table 1.4-4), but has no such emission factors for the combustion of propane.

Based on the information identified above, FCG urges EPA to exempt propane-fired area source boilers from the requirement of demonstrating compliance to specific emission limits and allow them to be subject only to limited work practice standards, as in the case with natural gas-fired boilers.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: John Huber

Commenter Affiliation: National Oilheat Research Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1831.1

Comment Excerpt Number: 8

Comment: A work practice standard should be adopted for liquid-fueled boilers under 10 MMBTU in capacity and greater than 3 MMBTU in capacity. In this situation, EPA has ample authority to prescribe a work practice standard instead of a numeric emissions limit. Section 112(h)(2)(B) authorizes EPA to establish work practice standards when “the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations.”

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Gary Melow

Commenter Affiliation: Michigan Biomass

Document Control Number: EPA-HQ-OAR-2006-0790-1917.1

Comment Excerpt Number: 9

Comment: We urge EPA to consider instead a work practice standard to assure good combustion conditions in biomass area boilers. We have advanced combustion controls on our units and it is important to understand that we are highly motivated to optimize combustion conditions at all times. Optimal combustion means more steam generation per unit of fuel, and more steam generation translates to more power produced for sale. This is generally true of any boiler system: good combustion means fuel savings.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Sarah E. Amick

Commenter Affiliation: Rubber Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1918.1

Comment Excerpt Number: 9

Comment: The GACT standard for area source industrial boilers should consist of work practices rather than numeric emissions limitations. In situations where the use of GACT is authorized (as it is here), 112(d)(5) on its face authorizes EPA to establish “standards or requirements which provide for the use of generally available control technologies or management practices.” (Emphasis added). In other words when setting standards based on GACT, EPA is expressly authorized to establish work practices instead of emissions limitations. There is no need under the express terms of 112(d)(5) for EPA to make a showing under 112(h) in order to set work practice standards. This interpretation is supported by the legislative history of 112[See, S. Rep. No. 101-228, 101st Cong. 1st sess. 171-172 (GACT is to encompass “methods, practices and techniques which are commercially available and appropriate for application by the sources in the category”)] and is reflected in numerous existing GACT

standards.[See, e.g., 72 Fed. Reg. 16636, 16639 et seq. (Apr. 4, 2007) (describing methods of determining GACT for 7 area source categories).]

For purposes of the industrial boiler area source rule, EPA has ample justification to establish a work practice for all relevant HAPs requiring periodic tune-up of affected boilers. As EPA explains in the proposal, this approach is appropriate for mercury because mercury is a fuel dependent HAP and “[f]uel usage can be reduced by improving the combustion efficiency of the boiler.”[75 Fed. Reg. at 31906] Similarly, EPA asserts that, “A boiler tune-up requirement would potentially result in the same non-mercury metallic HAP reduction as a PM emission limit based on performance of multiclones but would also reduce emissions of organic HAP.[Id. at 31908]. Thus, a requirement for affected boilers to be periodically tuned up is amply justified.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: David P. Tenny

Commenter Affiliation: National Alliance of Forest Owners

Document Control Number: EPA-HQ-OAR-2006-0790-1884.1

Comment Excerpt Number: 9

Comment: NAFO recommends that, in the final rule, EPA eliminate the emission limits requirements for dioxin/furan and mercury, and replace them with work practice requirements. Section 112(h)(2)(B) of the CAA authorizes EPA to establish work practice standards when “the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations.” The proposed standards are not practicable due to technological limitations. For example, as explained above, for dioxin/furan, current technology is unable to accurately measure at the level of the proposed standard for dioxin/furan. Moreover, to reach the extremely low proposed standards, industry would be required to spend billions of dollars, while providing minimal environmental benefit. As such, the limitations are also not practicable due to economic limitations.

The proposed rule already adopts work practice standards for other fuel sources. For natural gas-fired units, the proposed rule would establish a work practice standard instead of emission limits. As such, operators would be required to conduct annual or biennial tune-ups for each unit instead of adopting add-on controls. NAFO believes that for dioxin/furan and mercury, EPA’s rationale that supports establishing work practice standards for natural gas-fired units applies equally well to biomass units. EPA explained in the preamble that for gas-fired units larger than 100 mm Btu/hour, “the capital costs estimated for installing controls on these boilers and process heaters to comply with MACT limits for the five HAP groups is over \$14 billion.” 75 Fed. Reg. at 32025. EPA further explains that “emission limits on gas-fired boilers and process heaters may have the negative benefit of providing an incentive for a facility to switch from gas (considered a ‘clean’ fuel) to a ‘dirtier’ but cheaper fuel (i.e., coal).” Id. NAFO believes that for certain HAPs a work practice standard (instead of numeric emissions limitations) is similarly warranted for biomass units. Like gas-fired units, the cost of compliance with the dioxin/furan and mercury limitations for biomass units would be extraordinary. In addition, as described above, prescribing

work practice standards would avoid creating an incentive for facilities to switch from biomass, a “clean” fuel, to a higher-carbon fossil fuel. Accordingly, for dioxin/furan and mercury, EPA should establish work practices rather than emissions limitations for biomass boilers.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Matthew Markee

Commenter Affiliation: IN Group Companies

Document Control Number: EPA-HQ-OAR-2006-0790-1965.1

Comment Excerpt Number: 9

Comment: Therefore, based on the significant lack of representative data and the enormous number of potentially affected small sources, IN strongly urges EPA to use its authority to implement GACT or a work practice standard for Area Sources when that option is available.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: John Huber

Commenter Affiliation: National Oilheat Research Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1831.1

Comment Excerpt Number: 12

Comment: MACT standards for new or existing liquid fueled boilers less than 10 MMBTU and greater than 3 MMBTU should not be required. Bi-annual tune-ups should be the method of control and compliance.

New and existing liquid fueled boilers operating in major source sites should require a bi-annual tune-up where the service entity must keep records for EPA review, but not be required to record tune-up with EPA.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Bill Thomas

Commenter Affiliation: Shuqualak Lumber Company

Document Control Number: EPA-HQ-OAR-2006-0790-1948.1

Comment Excerpt Number: 12

Comment: We believe EPA should abandon the proposed numerical CO limits for area source boilers, and use work practices exclusively. Good combustion practices and tune-up requirements will achieve the same result with far lower costs. It is within EPA's legal bounds to develop this standard such that it will not further burden facilities that are already suffering from a devastating economy.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jim Simon

Commenter Affiliation: American Sugar Cane League

Document Control Number: EPA-HQ-OAR-2006-0790-2281.1

Comment Excerpt Number: 18

Comment: EPA's determination of what constitutes GACT for bagasse-fired boilers should include consideration of the extraordinarily high cost of compliance (\$4.6 - \$6.7 million per pound of POM (as 7-PAH)) and the work practices already being implemented at Louisiana sugar mills to ensure optimal operations of all boilers and associated control devices.

GACT standards (such as the implementation of the work practices described above in Section F) should be accepted and promulgated in lieu of emissions limitations and monitoring requirements.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Cheryl Sonnier Nolan

Commenter Affiliation: Louisiana Department of Environmental Quality

Document Control Number: EPA-HQ-OAR-2006-0790-2277

Comment Excerpt Number: 1

Comment: Biomass Combustion Is Not a Listed Source Category Under Section 112(c)(6)

Section 112(c)(6) of the CAA prescribes the following program for seven specific pollutants: With respect to alkylated lead compounds, polycyclic organic matter, hexachlorobenzene, mercury, polychlorinated biphenyls, 2,3,7,8- tetrachlorodibenzofurans and 2,3,7,8- tetrachlorodibenzo-p-dioxin, the Administrator shall, not later than 5 years after November 15, 1990, list categories and subcategories of sources assuring that sources accounting for not less than 90 per centum of the aggregate emissions of each such pollutant are subject to standards under subsection (d)(2) or (d)(4) of this section.

EPA's notice entitled "Source Category Listing for Section 112(d)(2) Rulemaking Pursuant to Section 112(c)(6) Requirements" identified the following as source categories "subject to regulation" for this purpose:

Industrial Coal Combustion,
Industrial Oil Combustion,
Industrial Wood/Wood Residue Combustion.
Commercial Coal Combustion,
Commercial Oil Combustion, and
Commercial Wood/Wood Residue Combustion.

EPA improperly proposes to regulate all biomass-fired boilers under Subpart JJJJJ, a much broader source category than "wood/wood residue" as previously identified pursuant to Section 112(c).

In the proposed rule, EPA defines "biomass" as follows:

Biomass means but is not limited to, wood residue, and wood products (e.g., trees, tree stumps, tree limbs, bark, lumber, sawdust, sanderdust, chips, scraps, slabs, millings, and shavings); animal manure, including litter and other bedding materials; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (e.g., almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds. This definition of biomass fuel is not intended to suggest that these materials are or not solid waste.

"Wood/wood residue" is a subcategory of biomass. Bagasse, corn stalks, animal manure, nut and grain hulls and chaff, and coffee bean hulls and grounds do not constitute "wood/wood residue" and the combustion of such materials should not be regulated under Subpart JJJJJ. In summary, EPA must limit the application of the proposed rule to wood/wood residue-fired sources, and the definition of "biomass" should be revised accordingly.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Tom Siegrist

Commenter Affiliation: Koch Nitrogen Company, LLC

Document Control Number: EPA-HQ-OAR-2006-0790-2216

Comment Excerpt Number: 1

Comment: EPA is authorized to regulate area sources under §112 in only two circumstances. §112(c)(3) provides that EPA shall list area source categories which the Administrator finds present a threat of adverse effects to human health or the environment. §112(c)(6) authorizes EPA to list categories and subcategories of sources, including area sources, as necessary to meet the specified aggregate control requirement for listed hazardous air pollutants (HAPs). There is no evidence in the rulemaking record suggesting that HAP emissions from gas-fired area source

industrial boilers present any threat of adverse effects to human health or the environment. Moreover, the Agency has concluded that there is no need to regulate gas-fired area source industrial boilers to meet the requirements of § 112(c)(6). EPA's decision to not regulate gas-fired industrial boilers under the Area Source Rule is consistent with its statutory authority and with the emissions from such units.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Winslow Sargeant

Commenter Affiliation: U.S. Small Business Administration

Document Control Number: EPA-HQ-OAR-2006-0790-2020

Comment Excerpt Number: 1

Comment: EPA Should Have Adopted A Health-Based Compliance Alternative (HBCA) Which Provides Alternative Emission Limits for Threshold Chemicals.

EPA has proposed not to exercise its discretion to use section 112(d)(4) to establish a health-based emission standard for HCL and manganese, despite acknowledging that it has such discretion under the Clean Air Act. For its part, the Boiler MACT Panel Report recommends that "EPA adopt the HBCA as a regulatory flexibility option for the Boiler MACT rulemaking. The panel recognizes, however, that EPA has concerns about its legal authority to provide and HBCA under the Clean Air Act, and EPA may ultimately determine that this flexibility is inconsistent with the Clean Air Act." [Footnote: SBAR Panel Report at 23.] In fact, EPA has not determined that the 112(d)(4) discretion is inconsistent with the Clean Air Act, nor has it determined that a health-based emission standard cannot be developed for HCL. Rather, EPA simply takes that position that it does have sufficient information to establish an HCL standard under section 112(d)(4), and EPA failed to adequately explain why it is failing to reaffirm the HBCA approach it adopted in the 2004 final boiler rule. Further, the Department of Justice, stated in its brief defending the previous use of 112(d)(4) in the boiler rule, that claims that the statute precludes the adoption of alternative standards was "meritless." [Footnote: "Environmental Petitioner's claim that the statute precludes EPA from establishing alternative standards for threshold pollutants (which petitioners mischaracterize as an exemption) is meritless. Final Brief For Respondent United States EPA, D.C. Cir Case No. 04-1385 (December 4, 2006) at 53-54.] Significantly, small entity representatives commented during the Panel that "adopting an HBCA . . . would be the most important step EPA could take to mitigate the serious financial harm the Boiler MACT would otherwise inflict on small entities . . . [t]herefore, HBCA should be a critical component of any future rule to lesson impact on small entities." [Footnote: SBAR Panel Report at 23.] Because EPA has not determined that an HCL HBCA is inconsistent with the Clean Air Act, EPA should have followed the unanimous Panel recommendation and adopted the HBCA for HCL and manganese as a regulatory flexibility option. Such an alternative alone is widely expected to save substantial capital and annual costs, and prevent a significant number of plant shutdowns and job losses, with no detriment to environmental protection. [Footnote: In the 2004 final Boiler rule, vacated for other reasons, it was estimated that the HBCA approach

saved over \$2 billion. See American Forest and Paper Association comments filed August 23, 2010 in this docket. The AF&PA SER comments estimated capital savings in excess of \$100 million just for the small facilities in the pulp & paper sector. SBAR Panel Report at 41. It was disappointing that EPA's discussion of the alternative approach provided no assessment of what costs might be saved by this alternative approach, and that might explain why this alternative was not more seriously considered.]

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Chris V. Isaacson

Commenter Affiliation: Alabama Forestry Association

Document Control Number: EPA-HQ-OAR-2006-0790-2060

Comment Excerpt Number: 1

Comment: EPA has not justified the need to regulate area source industrial boilers in order to satisfy 112(c)(6).

EPA's Area Source proposal for the 112(c)(6) pollutants is flawed because the Agency provides no basis for its assertion that mercury ("Hg") and polycyclic organic matter ("POM") must be regulated under this standard in order to satisfy the requirement that 90% of nationwide emissions of these pollutants must be regulated under 112 standards. In 1998, when EPA published the list of source categories that must be regulated to meet the 112(c)(6) 90% control requirement, the Agency did not draw firm conclusions as to whether any area source categories needed to be regulated. Instead, EPA explained that it "will determine whether specific regulation of the area source component of a source category is appropriate, or necessary to meet the 90 percent goal, based on more source category-specific data collected as part of the regulatory process." [Footnote: 63 FR 17838, 17842 (Apr. 10, 1998).]

With regard to POM, the proposed Industrial Boiler GACT and supporting documentation provides no such additional analysis justifying the need to regulate area source POM emissions to satisfy 112(c)(6). The preamble simply asserts, with no further analysis or supporting information, that "[w]e continue to believe that we must regulate POM from coal-fired, biomass-fired, and oil-fired area source boilers in order to meet the requirement in section 112(c)(6)." [Footnote: 75 FR 31904] In light of the failure of the 1998 notice to provide justification for regulating area source categories, this conclusory assertion does not provide a rational basis or adequate factual justification to support the proposed determination that area source industrial boilers must be regulated to satisfy the 112(c)(6) 90% requirement.

Similarly, with regard to Hg, the preamble to the area source proposal states that "based on the information we have learned to date as we are developing standards for various source categories, such as major source boilers, gold mines, commercial and industrial solid waste incinerators, and other categories, we believe that we only need coal-fired area source boilers to

meet the 90 percent requirement set forth in section 112(c)(6) for mercury." [Footnote: 75 FR 31904] The area source MACT floor memo further explains that:

EPA estimates that they have subjected to regulation or propose to regulate 90.3 percent of the 172.3 tons in the 1990 emissions inventory for mercury. Coal-fired area source boilers would provide an additional 0.72 percent. Regulation of these boilers under MACT would provide an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met. [Footnote: MACT Floor Memo at 2.]

To begin, neither the proposed rule nor the MACT floor memo provide data that support the proposed determination that 90.3 percent of the 1990 emissions inventory for mercury is subject to regulation. The proposed rule simply makes a conclusory assertion that is unsupported by facts or relevant information, which renders any final action based on this assertion invalid for failure to provide adequate record support.

Moreover, assuming for the sake of argument that the analysis is correct and adequately supported, 12(c)(6) does not obligate EPA to regulate in order to provide "an anticipated margin to ensure that the obligations under CM section 112(c)(6) are met." EPA has either exceeded the 90% standard or not. When the facts show that the 90% standard is met, EPA has satisfied its 112(c)(6) obligation. When the facts are not sufficient for EPA to reliably draw conclusions, EPA's obligation is to seek the additional information necessary to determine whether additional regulations are needed to meet the 90% standard. EPA's obligation to provide record support for its regulatory decisions is turned on its head by the assertion that the lack of facts or uncertainty as to the available information justifies additional regulation under 12(c) (6).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Teresa Marks

Commenter Affiliation: Arkansas Department of Environmental Quality

Document Control Number: EPA-HQ-OAR-2006-0790-2005

Comment Excerpt Number: 1

Comment: EPA's proposal asks for comment on an approach that would allow facilities to demonstrate that emissions of certain pollutants do not pose a public health threat. Section 112(d)(4) of the Clean Air Act allows EPA to consider health threshold levels, with a margin of safety, in establishing emission standards for pollutants. ADEQ believes the Section 112(d)(4) approach should be used in the final rule for establishing emission standards when biomass is used as an alternative fuel source in boilers. This approach would ensure that using biomass as a boiler fuel poses no public health threats without also discouraging or eliminating its use.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Lewis F. Gossett

Commenter Affiliation: South Carolina Manufacturers Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-2196.1

Comment Excerpt Number: 1

Comment: SCMA believes that EPA has not justified the need to impose numeric emissions limitations on area source industrial boilers and that ample authority and justification exists for establishing work practice standards for all area source boilers. If the Agency does decide to finalize numeric emissions limits, the proposed standards are not supported by the available data and would have to be substantially revised.

Even if EPA needed to regulate area source industrial boilers to meet 112(c)(6), it would not be required to adopt maximum achievable control technology (MACT) standards. CAA 112(d)(5) authorizes EPA in most cases to set standards for area sources using “generally available control technologies or management practices” (i.e., “GACT”) rather than “MACT.”

EPA takes the position in the proposal that it cannot use GACT to regulate HAP emissions from area source categories that are subject to 112(c)(6). This position fails to consider language in 112(d)(5) that defines the scope of the Agency’s authority to use GACT. Section 112(d)(5) expressly states that EPA is authorized to use GACT “[w]ith respect to categories and subcategories of area sources listed pursuant to [112(c)].”

The GACT standard for area source boilers should consist of work practices rather than numeric emissions limitations. EPA is authorized under 112(d)(5) to establish “standards or requirements which provide for the use of generally available control technologies or management practices.”. Periodic tune-up of affected boilers will reduce emissions by improving the combustion efficiency of the boiler and provides a cost effective, through reduced fuel usage, way for area source boilers to demonstrate compliance.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Kevin M. Dempsey

Commenter Affiliation: American Iron and Steel Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2061

Comment Excerpt Number: 1

Comment: We have several concerns with the proposal because it would potentially impose stringent numeric emission limitations that would be difficult, if not impossible, to meet. We believe EPA has not justified the need to impose numeric limits on area source industrial boilers

and that ample authority and justification exist for establishing work practices for all area source boilers. If, however, the agency decides to finalize numeric emission limits, the proposed standards are not supported by the available data and require substantial revision.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Floyd DesChamps

Commenter Affiliation: Alliance to Save Energy

Document Control Number: EPA-HQ-OAR-2006-0790-2191.1

Comment Excerpt Number: 1

Comment: We support inclusion of a biennial boiler tune-up requirement in the rule for applicable small (less than 10 million Btu input per hour) boilers as a means to enhance combustion efficiency and reduce HAP emissions. We suggest clarification as to whether the proposed rule would require tune-up solely of the combustion systems of boilers or of the entire boiler (or furnace) system (e.g., feedwater system, instruments, draft fan). We recommend the broader form of tune-up, which would allow additional efficiency measures to be addressed beyond combustion control.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Robert G. Hedden

Commenter Affiliation: Oilheat Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-2249

Comment Excerpt Number: 1

Comment: OMA's comments regarding the subject major source and area source standards regulating industrial, commercial, and institutional boilers and process heaters are that the proposed standards are far more stringent than needed to assure protection of health and the environment regarding HAP emissions from small and medium sized boilers. Furthermore, the proposed MACT standard for single boilers less than 10 MMBtu/h is not justified through any scientific data and should be changed. Therefore, it is imperative that both existing and new major and area source liquid-fueled boilers between 3 and 10 MMBtu/h capacity be subject to a work practice consisting of a bi-annual boiler tune-up for compliance.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Ted Michaels

Commenter Affiliation: Energy Recovery Council

Document Control Number: EPA-HQ-OAR-2006-0790-1951.1

Comment Excerpt Number: 2

Comment: EPA has not justified the need to regulate area source boilers in order to satisfy Section 112(c)(6).

EPA's Area Source proposal for the Section 112(c)(6) pollutants is flawed because EPA provides no basis for its assertion that polycyclic organic matter (POM) must be regulated under this standard in order to satisfy the requirement that 90% of nationwide emissions must be regulated under Section 112 standards. In 1998, when EPA published the list of source categories that must be regulated to meet the Section 112(c)(6) 90% control requirement, EPA did not draw firm conclusions as to whether any area source categories needed to be regulated. Instead, EPA explained that it "will determine whether specific regulation of the area source component of a source category is appropriate, or necessary to meet the 90 percent goal, based on more source category-specific data collected as part of the regulatory process." (63 FR 17838, 17842).

With regard to POM, the proposed generally available control technologies or management practices (GACT) and supporting documentation provides no such additional analysis justifying the need to regulate area source POM emissions to satisfy Section 112(c)(6). The preamble simply asserts, with no further analysis or supporting information, that "[w]e continue to believe that we must regulate POM from coal-fired, biomass-fired, and oil-fired area source boilers in order to meet the requirement in section 112(c)(6)." (75 FR 31904). In light of the failure of the 1998 notice to provide justification for regulating area source categories, this assertion does not provide a rational basis or adequate factual justification to support the proposed determination that area source boilers must be regulated to satisfy the Section 112(c)(6) 90% requirement.

Section 112(c)(6) does not obligate EPA to regulate in order to provide "an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met." EPA has either exceeded the 90% standard or not. When the facts show that the 90% standard is met, EPA has satisfied its Section 112(c)(6) obligation. When the facts are not sufficient for EPA to reliably draw conclusions, EPA's obligation is to seek the additional information necessary to determine whether additional regulations are needed to meet the 90% standard. EPA's obligation to provide record support for its regulatory decisions is turned on its head by the assertion that the lack of facts or uncertainty as to the available information justifies additional regulation under Section 112(c)(6).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: James L. Kavanaugh

Commenter Affiliation: Missouri Department of Natural Resources

Document Control Number: EPA-HQ-OAR-2006-0790-2251

Comment Excerpt Number: 2

Comment: New units burning coal, biomass, or oil are required to meet emission limits for all size units. Units that produce very little pollution will be required to have stack test, control devices, etc. Per EPA's analysis of existing small units, this will be cost prohibitive for small business. We recommend handling new, small units like existing units with practical reduction of emissions throughout the use of biennial tune-ups of the unit, rather than specific emission limits.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Wayne J. Galler

Commenter Affiliation: Georgia Industry Environmental Coalition, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1997.1

Comment Excerpt Number: 2

Comment: While the proposed rule for area source industrial boilers ("Area Source Rule") includes a number of laudable provisions - most notably the proposal to not regulate gas-fired units

GIEC is concerned with the proposal because it would impose stringent numeric emissions limitations that would be difficult, if not impossible, to meet. GIEC believes that EPA has proposed unnecessary numeric emissions limitations on area source industrial boilers and that ample authority and justification exists for establishing work practice standards for all area source boilers. Were the Agency to decide, nevertheless, to finalize numeric emissions limits, GIEC believes that the proposed standards are not supported by the available data and recommends that they be substantially revised.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Don Kaiser

Commenter Affiliation: Pellet Fuels Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2231

Comment Excerpt Number: 2

Comment: As shown above, Congress did not authorize EPA to set a floor on the basis of emissions test data, without also determining that there are technologically feasible means of achieving that floor which actual usage within the subcategory has shown are available to all of the units in the subcategory given their particular basic design. If EPA were to determine that there are no such means of control across the subcategory, it would have to subcategorize further in order to group units of like design or, if that were not practicable, base the ultimate standard

on a universally applicable work practice, such as tune-ups. PFI respectfully urges EPA to return to its 2004 interpretation to the same effect.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Duane Mummert

Commenter Affiliation: South Carolina Chamber of Commerce

Document Control Number: EPA-HQ-OAR-2006-0790-2247

Comment Excerpt Number: 2

Comment: We believe that this proposal would impose stringent numeric emissions limitations that would be difficult, if not impossible, to meet. It also would require an expensive one time energy assessment that is beyond EPA's authority under § 112 to regulate "sources" of HAPs to require.

The ETC believes that EPA has not justified the need to impose numeric emissions limitations on area source industrial boilers and that ample authority and justification exists for establishing work practice standards for all area source boilers. If the Agency does decide to finalize numeric emissions limits, the proposed standards are not supported by the available data and would have to be substantially revised.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Martin T. Booher

Commenter Affiliation: Ethan Allen Interiors, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1974.1

Comment Excerpt Number: 2

Comment: EPA should allow existing boilers with a heat input capacity limitation of greater than 10 MMBtu/hr (up to 60 MMBtu/hr) to employ work practice standards in lieu of the proposed CO limits. In addition, when establishing this exemption, EPA should collect more economic data from the regulated community and update its cost-to-sales analysis regarding the potential burden of emissions controls on companies using biomass- and oil-fired boilers and consider other costs such as new boiler controls, or updating or replacing combustion fire box technology. Also, as an alternative, EPA should consider requiring operator training or improved automated control technologies in lieu of the proposed CO limits.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Kevin M. Dempsey
Commenter Affiliation: American Iron and Steel Institute
Document Control Number: EPA-HQ-OAR-2006-0790-2061
Comment Excerpt Number: 2

Comment: EPA Has Not Justified the Need to Regulate Area Source Industrial Boilers in Order to Satisfy §112(c)(6)

EPA's MACT proposal for the 112(c)(6) pollutants is flawed because the agency provides no basis for its assertion that mercury (Hg) and polycyclic organic matter (POM) must be regulated under this standard in order to satisfy the requirement that 90% of nationwide emissions of these pollutants must be regulated under 112 standards. In 1998, when EPA published the list of source categories that must be regulated to meet the 112(c)(6) 90% control requirement, the agency did not draw firm conclusions as to whether any area source categories needed to be regulated. Instead, EPA explained that it "will determine whether specific regulation of the area source component of a source category is appropriate, or necessary to meet the 90 percent goal, based on more source category-specific data collected as part of the regulatory process."

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Mike Beebe
Commenter Affiliation: Governor, State of Arkansas
Document Control Number: EPA-HQ-OAR-2006-0790-2001
Comment Excerpt Number: 2

Comment: While I strongly support efforts to address serious health threats from air emissions, I feel that where no risk to public health is posed, regulations should be crafted in a balanced way that sustains both the environment and jobs. And I believe the federal Clean Air Act provides that flexibility. Section 112(d)(4) of the Clean Air Act allows the EPA to consider health threshold levels with a margin of safety in establishing emission standards for pollutants. The EPA's proposal asks for comment on an approach that would allow facilities to demonstrate that emissions of certain pollutants do not pose a public health threat. I appreciate your willingness to consider flexible approaches that appropriately address the diversity of boilers, operations, sectors, and fuels that can prevent severe job losses and billions of dollars in unnecessary regulatory costs. Unfortunately, EPA's proposal concludes that the use of the authority under Section 112(d)(4) of the Clean Air Act is discretionary, and the EPA does not support its use in the Boiler MACT. While it is appropriate for improvements in technology to drive pollution controls to achieve cleaner and healthier air, EPA should not lose sight of the fact that, requiring cleaner emissions that provide no benefit to public health is counter-productive for our economic development, especially in light of the current recession our country is facing. I believe that Section 112(d)(4) reflects Congress's intent to provide flexibility where there is no

public health threat, and I believe it makes sense to adopt that approach in the final rule for threshold substances, i.e. pollutants associated with using biomass as an alternative fuel.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Chris V. Isaacson

Commenter Affiliation: Alabama Forestry Association

Document Control Number: EPA-HQ-OAR-2006-0790-2060

Comment Excerpt Number: 2

Comment: Even if EPA needed to regulate area source industrial boilers to meet 112(c)(6), it would not be required to adopt MACT standards.

CAA 112(d)(5) authorizes EPA in most cases to set standards for area sources using "generally available control technologies or management practices" (i.e., "GACT") rather than "MACT." Section 112(d)(5) establishes a special rule for area source standards. It provides, "With respect to categories and subcategories of area sources listed pursuant to [112(c)], the Administrator may, in lieu of the authorities provided in [112(d)]1 ... elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources." In other words, EPA may establish "GACT" standards for area sources rather than "MACT" standards under 112(d).

EPA takes the position in the proposal that it cannot use GACT to regulate HAP emissions from area source categories that are subject to 112(c)(6). This position suffers from two fundamental flaws. The first problem is that it ignores the language in 112(d)(5) that defines the scope of the Agency's authority to use GACT. Section 112(d)(5) expressly states that EPA is authorized to use GACT "[w]ith respect to categories and subcategories of area sources listed pursuant to [112(c)]." The CAA provides only two ways for EPA to list an area source category for purposes of regulating HAP emissions from the category under 112. First, 112(c)(3) — which is aptly entitled "Area Sources" — provides that EPA "shall list" area source categories "which the Administrator finds presents a threat of adverse effects to human health or the environment...warranting regulation under this section."

Second, 112(c)(6) authorizes EPA to "list categories and subcategories of sources" —including area sources — as necessary to meet the specified aggregate control requirement for the seven listed HAPs. Since all area source categories — including those listed under 112(c)(6) — are listed "pursuant to 112(c)," EPA has authority under the express terms of 112(d)(5) to use GACT in regulating area source categories listed and regulated under to 112(c)(6).

A fundamental problem with EPA's position is that it ignores the language in 112(d)(5) authorizing EPA to use the GACT method "in lieu of the 112(d)(2) MACT procedure. EPA itself has observed that the term "in lieu of is commonly understood to mean "in place the of and, thus,

has previously correctly concluded that, "CAA section 112(d)(5) authorizes EPA to promulgate standards under CAA section 112(d)(5) that provide for the use of generally available control technologies or management practices (GACT), instead of issuing MACT standards pursuant to CAA section 112(d)(2) and (d)(3)." [Footnote: 73 FR 1916,1920-1921 (Jan. 10, 2008).] In short, the statute plainly says that the requirement to set a standard under 112(d)(2) can be satisfied by using the alternative GACT procedure specified in 112(d)(5). As a result, setting GACT under 112(d)(5) meets the 112(c)(6) requirement to regulate under 112(d)(2).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Michael A. Zapkin

Commenter Affiliation: Eastman Kodak Company

Document Control Number: EPA-HQ-OAR-2006-0790-2170.1

Comment Excerpt Number: 3

Comment: EPA has estimated that CO emission reductions of 8,832 tons per year will be realized under the proposed standard for 168,003 liquid fired boilers at existing area sources. See "Methodology for Estimating Impacts from Industrial, Commercial, Institutional Boilers at Area Sources of Hazardous Air Pollutant Emissions" EPA-HQ-OAR-2006-0790-0034, (ERG April 2010, Appendix B-1). That reduction equates to 105 pounds of CO per year per boiler or 315 pounds (0.16 tons) per year for the Eastman Gelatine facility. Kodak recognizes that EPA is proposing CO as a surrogate for organic HAP; however, the organic HAP reduction associated with 315 pounds of CO is also insignificant.

For Area Source Industrial Boilers, EPA should amend the rule so that GACT is applied in all cases where it is authorized. Under the Clean Air Act (CAA), section 112(d)(5) establishes the standard setting methodology for area sources. Section 112(d)(5) provides that:

[w]ith respect to categories and subcategories of area sources listed pursuant to [§ 112(c)], the Administrator may, in lieu of the authorities provided in [§ 112(d)] ... elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources.

42 USC § 7412(d)(5) (emphasis added). This section gives EPA the authority to promulgate GACT standards for area sources rather than MACT standards under § 112(d). While the statute does not define a method for establishing GACT standards, EPA construes this authority as providing more flexibility than the MACT standard setting process. In fact, one important difference is that "[i]n determining GACT for a particular source category, [EPA] consider[s] the costs and economic impacts of available control technologies and management practices on that category." 75 FR 31920. However, for certain area source standards, EPA interprets the CAA to require MACT. See, e.g., 72 FR 53814, 53815-16 (Sept. 20, 2007). Because cost cannot be

considered in determining MACT, area source standards for § 112(c)(6) pollutants are more stringent than they would be if EPA applied GACT.

EPA has failed to provide justification for applying MACT to POM emissions. Therefore, its approach is unreasonable. Kodak recommends that EPA implement GACT in cases where it is authorized. Such an approach will give EPA the necessary discretion as needed when dealing with small sources. Furthermore, EPA should utilize work practice standards in lieu of numerical emission limits when that option is available.

Based on significant cost for insignificant environmental benefit Kodak believes that a work practice standard in lieu of a numerical standard for CO is appropriate as Generally Achievable Control Technology (GACT) for existing oil-fired boilers.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jay C. Moon

Commenter Affiliation: Mississippi Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-2000

Comment Excerpt Number: 3

Comment: While we support EPA's decision to establish work practice standards in lieu of emission limits for certain gas-fired boilers, EPA should provide for work practice standards on all gas-fired units and biomass boilers with this rule. EPA has properly exercised its authority by proposing to rely on work practice standards in lieu of emission limits for certain gas-fired boilers. 75 Fed. Reg. 32025. By doing so, EPA is taking one important step toward making sure that these rules do not unduly harm certain segments of the nation's critical manufacturing base. As EPA recognizes, the capital cost of emissions controls for the numerous existing gas-fired boilers would be extraordinarily high. Id. Further, EPA correctly concluded that imposing emission limitations on gas-fired boilers would create a disincentive for switching to gas from oil, coal or biomass as a control technique. Id. In fact, it could create an incentive for facilities to switch away from gas to other fuels. Both outcomes should be avoided.

all gas-fired units. Despite the exceedingly strict emissions limits that are proposed, EPA has not identified a demonstrated path to compliance for the remaining gas-fired units for which EPA has not proposed to make work practices available. Rather than imposing undue and unrealistic costs and standards on these remaining gas-fired boilers, EPA should allow work practices rather than require emissions limitations.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Ted Michaels

Commenter Affiliation: Energy Recovery Council

Document Control Number: EPA-HQ-OAR-2006-0790-1951.1

Comment Excerpt Number: 3

Comment: Even if EPA needed to regulate area source boilers to meet Section 112(c)(6), it would not be required to adopt MACT standards.

Section 112(d)(5) authorizes EPA in most cases to set standards for area sources using “generally available control technologies or management practices” (i.e., GACT) rather than MACT. Section 112(d)(5) establishes a special rule for area source standards. It provides, “With respect to categories and subcategories of area sources listed pursuant to [Section 112(c)], the Administrator may, in lieu of the authorities provided in [Section 112(d)] ... elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources.” In other words, EPA may establish GACT standards for area sources rather than MACT standards under Section 112(d).

EPA takes the position in the proposal that it cannot use GACT to regulate HAP emissions from area source categories that are subject to Section 112(c)(6). This position has two flaws. The first problem is that it ignores the language in Section 112(d)(5) that defines the scope of EPA’s authority to use GACT. Section 112(d)(5) expressly states that EPA is authorized to use GACT “[w]ith respect to categories and subcategories of area sources listed pursuant to [Section 112(c)].” The CAA provides only two ways for EPA to list an area source category for purposes of regulating HAP emissions from the category under Section 112. First, Section 112(c)(3) – which is aptly entitled “Area Sources” – provides that EPA “shall list” area source categories “which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section.”

Second, Section 112(c)(6) authorizes EPA to “list categories and subcategories of sources” – including area sources – as necessary to meet the specified aggregate control requirement for the seven listed HAPs. Since all area source categories – including those listed under Section 112(c)(6) – are listed “pursuant to Section 112(c),” EPA has authority under the express terms of Section 112(d)(5) to use GACT in regulating area source categories listed and regulated under to Section 112(c)(6).

A fundamental problem with EPA’s position is that it ignores the language in Section 112(d)(5) authorizing EPA to use the GACT method “in lieu of” the Section 112(d)(2) MACT procedure. EPA itself has observed that the term “in lieu of” is commonly understood to mean “in place of” and, thus, has previously correctly concluded that, “CAA section 112(d)(5) authorizes EPA to promulgate standards under CAA section 112(d)(5) that provide for the use of generally available control technologies or management practices (GACT), instead of issuing MACT standards pursuant to CAA section 112(d)(2) and (d)(3).” (73 FR 1916, 1920-1921). In short, the statute plainly states that the requirement to set a standard under Section 112(d)(2) can be satisfied by using the alternative GACT procedure specified in Section 112(d)(5). As a result,

setting GACT under Section 112(d)(5) meets the Section 112(c)(6) requirement to regulate under Section 112(d)(2).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Duane Mummert

Commenter Affiliation: South Carolina Chamber of Commerce

Document Control Number: EPA-HQ-OAR-2006-0790-2247

Comment Excerpt Number: 3

Comment: Even if EPA needed to regulate area source industrial boilers to meet § 112(c)(6), it would not be required to adopt maximum achievable control technology (MACT) standards. CAA § 112(d)(5) authorizes EPA in most cases to set standards for area sources using "generally available control technologies or management practices" (i.e., "GACT") rather than "MACT." EPA takes the position in the proposal that it cannot use GACT to regulate HAP emissions from area source categories that are subject to § 112(c)(6). This position fails to consider language in § 112(d)(5) that defines the scope of the Agency's authority to use GACT. Section 112(d)(5) expressly states that EPA is authorized to use GACT "[w]ith respect to categories and subcategories of area sources listed pursuant to [§ 112(c)]."

The GACT standard for area source boilers should consist of work practices rather than numeric emissions limitations. EPA is authorized under § 112(d)(5) to establish "standards or requirements which provide for the use of generally available control technologies or management practices." Periodic tune-up of affected boilers will reduce emissions by improving the combustion efficiency of the boiler and provides a cost effective, through reduced fuel usage, way for area source boilers to demonstrate compliance.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Paul Lyskava

Commenter Affiliation: Pennsylvania Forest Products Association

Document Control Number: EPA-HQ-OAR-2006-0790-2223.1

Comment Excerpt Number: 3

Comment: We believe that EPA has not justified the need to impose numeric emissions limitations on area source industrial boilers in order to satisfy § 112(c)(6). Ample authority and justification exists for establishing work practice standards for all area source boilers.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Wayne J. Galler

Commenter Affiliation: Georgia Industry Environmental Coalition, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1997.1

Comment Excerpt Number: 3

Comment: In its Area Source proposal for the 112(c)(6) pollutants, EPA provides no basis for the assertion that mercury ("Hg") and polycyclic organic matter ("POM") must be regulated under this standard in order to satisfy the requirement that 90% of nationwide emissions of these pollutants must be regulated under 112 standards. In 1998, when EPA published the list of source categories that must be regulated to meet the 112(c)(6) 90% control requirement, the Agency did not draw firm conclusions as to whether any area source categories needed to be regulated. Instead, EPA explained that it "will determine whether specific regulation of the area source component of a source category is appropriate, or necessary to meet the 90 percent goal, based on more source category-specific data collected as part of the regulatory process." [63 FR 17838, 17842 (Apr. 10, 1998).]

With regard to POM, the proposed Industrial Boiler CACI and supporting documentation provide no such additional analysis justifying the need to regulate area source POM emissions to satisfy 112(c)(6). The preamble simply asserts, with no further analysis or supporting information, that "[w]e continue to believe that we must regulate POM from coal-fired, biomass-fired, and oil-fired area source boilers in order to meet the requirement in section 112(c)(6)" [75 FR 31904]. Because the 1998 notice does not provide justification for regulating area source categories, this conclusory assertion does not provide a rational basis or adequate factual justification to support the proposed determination that area source industrial boilers must be regulated to satisfy the 112(c)(6) 90% requirement.

Similarly, with regard to Hg, the preamble to the area source proposal states that "based on the information we have learned to date as we are developing standards for various source categories, such as major source boilers, gold mines, commercial and industrial solid waste incinerators, and other categories, we believe that we only need coal-fired area source boilers to meet the 90 percent requirement set forth in section 112(c)(6) for mercury" [75 FR 31904]. The area source MACT floor memo further explains that:

"EPA estimates that they have subjected to regulation or propose to regulate 90.3 percent of the 172.3 tons in the 1990 emissions inventory for mercury. Coal-fired area source boilers would provide an additional 0.72 percent. Regulation of these boilers under MACT would provide an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met." [MACT Floor Memo at 2].

Based on GIEC review, neither the proposed rule nor the MACT floor memo provides data that support the proposed determination that 90.3 percent of the 1990 emissions inventory for mercury is subject to regulation. The proposed rule simply makes a conclusory assertion without any factual support. It could be argued that any final action based on this assertion is invalid for failure to provide adequate record support.

Assuming that the analysis is correct and adequately supported, 112(c)(6) does not obligate EPA to regulate in order to provide "an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met." When the facts show that the 90% standard is met, EPA has satisfied its 112(c)(6) obligation and additional margin is unnecessary. When the facts are not sufficient for EPA to reliably draw conclusions, EPA's obligation is to seek the additional information necessary to determine whether additional regulations are needed to meet the 90% standard. The lack of facts or uncertainty as to the available information do not justify additional regulation under 112(c) (6).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: A. Steven Young

Commenter Affiliation: Association of Independent Corrugated Converters

Document Control Number: EPA-HQ-OAR-2006-0790-1994.1

Comment Excerpt Number: 3

Comment: While we support EPA's decision to establish work practice standards in lieu of emission limits for certain gas-fired boilers, EPA should provide for work practice standards on all gas-fired units and biomass boilers with this rule. EPA has properly exercised its authority by proposing to rely on work practice standards in lieu of emission limits for certain gas-fired boilers. 75 Fed. Reg. 32025. By doing so, EPA is taking one important step toward making sure that these rules do not unduly harm certain segments of the nation's critical manufacturing base. As EPA recognizes, the capital cost of emissions controls for the numerous existing gas-fired boilers would be extraordinarily high. Id. Further, EPA correctly concluded that imposing emission limitations on gas-fired boilers would create a disincentive for switching to gas from oil, coal or biomass as a control technique. Id. In fact, it could create an incentive for facilities to switch away from gas to other fuels. Both outcomes should be avoided.

EPA should, however, take the necessary next step and extend the work practice approach to all gas-fired units. Despite the exceedingly strict emissions limits that are proposed, EPA has not identified a demonstrated path to compliance for the remaining gas-fired units for which EPA has not proposed to make work practices available. Rather than imposing undue and unrealistic costs and standards on these remaining gas-fired boilers, EPA should allow work practices rather than require emissions limitations.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: John Donahue

Commenter Affiliation: Sappi Fine Paper North America

Document Control Number: EPA-HQ-OAR-2006-0790-2210.1

Comment Excerpt Number: 3

Comment: CAA § 112(d)(5) authorizes EPA in most cases to set standards for area sources using “generally available control technologies or management practices” (i.e., “GACT”) rather than “MACT.” Section 112(d)(5) establishes a special rule for area source standards. It provides, “With respect to categories and subcategories of area sources listed pursuant to [§ 112(c)], the Administrator may, in lieu of the authorities provided in [§ 112(d)] ... elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources.” In other words, EPA may establish “GACT” standards for area sources rather than “MACT” standards under § 112(d).

EPA takes the position in the proposal that it cannot use GACT to regulate HAP emissions from area source categories that are subject to § 112(c)(6). This position suffers from two fundamental flaws. The first problem is that it ignores the language in § 112(d)(5) that defines the scope of the Agency’s authority to use GACT. Section 112(d)(5) expressly states that EPA is authorized to use GACT “[w]ith respect to categories and subcategories of area sources listed pursuant to [§ 112(c)].” The CAA

provides only two ways for EPA to list an area source category for purposes of regulating HAP emissions from the category under § 112. First, § 112(c)(3) – which is aptly entitled “Area Sources” – provides that EPA “shall list” area source categories “which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section.”

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Kevin M. Dempsey

Commenter Affiliation: American Iron and Steel Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2061

Comment Excerpt Number: 3

Comment: With regard to POM, the Proposed Rule and supporting documentation provides no such additional analysis justifying the need to regulate area source POM emissions to satisfy §112(c)(6). The preamble simply asserts, with no further analysis or supporting information, that “[w]e continue to believe that we must regulate POM from coal-fired, biomass-fired, and oil-fired area source boilers in order to meet the requirement in section 112(c)(6).”² In light of the failure of the 1998 notice to provide justification for regulating area source categories, this conclusory assertion does not provide a rational basis or adequate factual justification to support the proposed determination that area source industrial boilers must be regulated to satisfy the 112(c)(6) 90% requirement.

Similarly, with regard to Hg, the preamble to the Proposed Rule states that “based on the information we have learned to date as we are developing standards for various source

categories, such as major source boilers, gold mines, commercial and industrial solid waste incinerators, and other categories, we believe that we only need coal-fired area source boilers to meet the 90% requirement set forth in section 112(c)(6) for mercury.”³ The area source MACT floor memo further explains that:

EPA estimates that they have subjected to regulation or propose to regulate 90.3 percent of the 172.3 tons in the 1990 emissions inventory for mercury. Coal-fired area source boilers would provide an additional 0.72 percent. Regulation of these boilers under MACT would provide an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met.

Assuming for the sake of argument that the analysis is correct and adequately supported, 112(c)(6) does not obligate EPA to regulate in order to provide “an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met.” EPA has either exceeded the 90% standard or not. When the facts show that the 90% standard is met, EPA has satisfied its §112(c)(6) obligation. When the facts are not sufficient for EPA to reliably draw conclusions, EPA’s obligation is to seek the additional information necessary to determine whether additional regulations are needed to meet the 90% standard. EPA’s obligation to provide record support for its regulatory decisions is turned on its head by the assertion that the lack of facts or uncertainty as to the available information justifies additional regulation under §112(c) (6).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: John Donahue

Commenter Affiliation: Sappi Fine Paper North America

Document Control Number: EPA-HQ-OAR-2006-0790-2210.1

Comment Excerpt Number: 4

Comment: § 112(c)(6) authorizes EPA to “list categories and subcategories of sources” – including area sources – as necessary to meet the specified aggregate control requirement for the seven listed HAPs. Since all area source categories – including those listed under § 112(c)(6) – are listed “pursuant to § 112(c),” EPA has authority under the express terms of § 112(d)(5) to use GACT in regulating area source categories listed and regulated under to § 112(c)(6).

A fundamental problem with EPA’s position is that it ignores the language in § 112(d)(5) authorizing EPA to use the GACT method “in lieu of” the § 112(d)(2) MACT procedure. EPA itself has observed that the term “in lieu of” is commonly understood to mean “in place the of” and, thus, has previously correctly concluded that, “CAA section 112(d)(5) authorizes EPA to promulgate standards under CAA section 112(d)(5) that provide for the use of generally available control technologies or management practices (GACT), instead of issuing MACT standards pursuant to CAA section 112(d)(2) and (d)(3).” [73 FR 1916,1920-1921 (Jan. 10, 2008).] In short, the statute plainly says that the requirement to set a standard under § 112(d)(2) can be satisfied by using the alternative GACT procedure specified in § 112(d)(5). As a result, setting GACT under § 112(d)(5) meets the §112(c)(6) requirement to regulate under § 112(d)(2).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Wayne J. Galler

Commenter Affiliation: Georgia Industry Environmental Coalition, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1997.1

Comment Excerpt Number: 4

Comment: CAA 112(d)(5) authorizes EPA, in most cases, to set standards for area sources using GACT rather than MACT. Section 112(d)(5) establishes a special rule for area source standards. It provides, "With respect to categories and subcategories of area sources listed pursuant to [112(c)], the Administrator may in lieu of the authorities provided in [112(d)] ... elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources." In other words, EPA may establish GACT standards for area sources rather than MACT standards under 112(d).

GIEC believes the position that EPA takes in the proposal that it cannot use GACT to regulate HAP emissions from area source categories that are subject to 112(c)(6) is incorrect. First, it does not take into account the language in 112(d)(5) that defines the scope of the Agency's authority to use GACT. Section 112(d)(5) expressly states that EPA is authorized to use GACT "[w]ith respect to categories and subcategories of area sources listed pursuant to [112(c)]." The CAA provides only two ways for EPA to list an area source category for purposes of regulating HAP emissions from the category under 112:

1. 112(c)(3) - which is aptly entitled "Area Sources" - provides that EPA "shall list" area source categories "which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section."

2. 112(c)(6) authorizes EPA to "list categories and subcategories of sources" - including area sources - as necessary to meet the specified aggregate control requirement for the seven listed HAPs. Since all area source categories - including those listed under 112(c)(6) - are listed "pursuant to 112(c)," EPA has authority under the express terms of 112(d)(5) to use GACT in regulating area source categories listed and regulated under to 112(c)(6).

Second, EPA's position does not consider the language in 112(d)(5) authorizing EPA to use the GACT method in lieu of the 112(d)(2) MACT procedure. EPA itself has observed that the term in lieu of is commonly understood to mean in the place of" and thus, has previously correctly concluded that "CAA section 112(d)(5) authorizes EPA to promulgate standards under CAA section 112(d)(5) that provide for the use of generally available control technologies or management practices (GACT), instead of issuing MACT standards pursuant to CAA section 112(d)(2) and (d)(3)[73 FR 1916,1920-1921 (Jan. 10, 2008)]. In short, the statute clearly says that the requirement to set a standard under 112(d)(2) can be satisfied by using the, alternative GACT procedure specified in 112(d)(5). As a result, setting GACT under 112(05) meets the 1 12(c)(6) requirement to regulate under 112(d)(2).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Cynthia A. Finley

Commenter Affiliation: National Association of Clean Water Agencies

Document Control Number: EPA-HQ-OAR-2006-0790-2260.1

Comment Excerpt Number: 4

Comment: NACWA agrees with EPA that work standards are appropriate for small boilers, rather than emissions limits, and EPA's proposed requirement for conducting a tune-up of the boiler every two years is reasonable. However, NACWA does have some concerns about how this requirement would be implemented.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: John Ledger

Commenter Affiliation: Associated Oregon Industries

Document Control Number: EPA-HQ-OAR-2006-0790-2024.1

Comment Excerpt Number: 4

Comment: EPA has properly exercised its authority by proposing to rely on work practice standards in lieu of emission limits for certain gas-fired boilers. As EPA recognizes, the capital cost of emissions controls for the numerous existing gas-fired boilers would be extraordinarily high. EPA should take the next step and extend the work practice approach to all gas-fired units.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jay C. Moon

Commenter Affiliation: Mississippi Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-2000

Comment Excerpt Number: 4

Comment: EPA should also establish annual tune-up work practice as the MACT standard for biomass boilers. For example, in the forest products industry alone, the estimated cost of complying with the proposed HAP emissions limitations for biomass boilers is \$3.3 billion. This is an extraordinary cost that, in the context of the forest products industry, equals or exceeds the magnitude of the economic burden that EPA predicts for the Gas 1 subcategory. Similarly severe

economic impacts are expected in other industry sectors where biomass boilers are widely use, such as the furniture, sugar, and agricultural products industries. Thus, there is strong economic justification for prescribing work practice standards for biomass boilers in lieu of numeric emissions limitations.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jim Griffin

Commenter Affiliation: American Chemistry Council

Document Control Number: EPA-HQ-OAR-2006-0790-1925.1

Comment Excerpt Number: 4

Comment: EPA Has Authority To Set GACT Standards For Section 112(c)(6) Pollutants. Pursuant to 112(d)(5) of the Clean Air Act, EPA may establish emission reduction standards based on generally available control technology (GACT) for any HAP, including polycyclic organic matter (POM) and mercury (Hg). However, EPA is proposing to regulate PM and Hg emissions based on its MACT based analyses and to require area sources to install MACT to comply with these standards. We believe EPA should reconsider this proposal and reconsider the MACT analysis that is the basis for the proposed rule. [FOOTNOTE: MACT Floor Analysis for the Industrial, Commercial, Institutional Boilers National Emission Standards for Hazardous Air Pollutants – Area Source; Memorandum from Amanda Singleton, ERG to Jim Eddinger, EPA; April 2010. EPA-HQ-OAR-2006-0790-0049] A discussion on background and several specific recommendations follow below.

Section 112(c)(6) specifies that “standards under subsection (d)(2) or (d)(4)” must be established for the HAP emissions that EPA determines must be regulated to satisfy the aggregate control requirement. Section 112(d)(2) sets out the basic standard setting methodology for 112 HAP emissions standards, requiring “the maximum degree of reduction in emissions of the hazardous air pollutants subject to this section” – i.e., “MACT.” Section 112(d)(3) generally requires “MACT” to be no less stringent than the emissions limitation achieved by the better performing sources in the given source category (for existing sources) or the best controlled similar source (for new sources). With regard to “threshold pollutants,” 112(d)(4) authorizes EPA to forego that formulaic MACT approach and, instead, consider the “threshold level, with an ample margin of safety, when establishing standards” under 112(d).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Kevin M. Dempsey

Commenter Affiliation: American Iron and Steel Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2061

Comment Excerpt Number: 4

Comment: Even if EPA Needed to Regulate Area Source Industrial Boilers to Meet §112(c)(6), It Would Not be Required to Adopt MACT Standards

CAA §112(d)(5) authorizes EPA in most cases to set standards for area sources using “generally available control technologies or management practices” (i.e., “GACT”) rather than “MACT.” Section 112(d)(5) establishes a special rule for area source standards. It provides, “With respect to categories and subcategories of area sources listed pursuant to [112(c)], the Administrator may, in lieu of the authorities provided in [112(d)] ... elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources.” In other words, EPA may establish “GACT” standards for area sources rather than “MACT” standards under §112(d).

EPA takes the position in the proposal that it cannot use GACT to regulate HAP emissions from area source categories that are subject to 112(c)(6). This position suffers from two fundamental flaws. The first problem is that it ignores the language in 112(d)(5) that defines the scope of the agency’s authority to use GACT. Section 112(d)(5) expressly states that EPA is authorized to use GACT “[w]ith respect to categories and subcategories of area sources listed pursuant to [112(c)].” The CAA provides only two ways for EPA to list an area source category for purposes of regulating HAP emissions from the category under 112

Section 112(c)(3) – which is aptly entitled “Area Sources” – provides that EPA “shall list” area source categories “which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section. Section 112(c)(6) similarly authorizes EPA to “list categories and subcategories of sources” – including area sources – as necessary to meet the specified aggregate control requirement for the seven listed HAPs. Since all area source categories – including those listed under 112(c)(6) – are listed “pursuant to 112(c),” EPA has authority under the express terms of 112(d)(5) to use GACT in regulating area source categories listed and regulated under to 112(c)(6).

The second fundamental problem with EPA’s position is that it ignores the language in 112(d)(5) authorizing EPA to use the GACT method “in lieu of” the 112(d)(2) MACT procedure. EPA itself has observed that the term “in lieu of” is commonly understood to mean “in place the of” and, thus, has previously correctly concluded that, “CAA section 112(d)(5) authorizes EPA to promulgate standards under CAA section 112(d)(5) that provide for the use of generally available control technologies or management practices (GACT), instead of issuing MACT standards pursuant to CAA section 112(d)(2) and (d)(3).” [Footnote: 73 Fed. Reg. 1916,1920-1921 (Jan. 10, 2008).] In short, the statute plainly says that the requirement to set a standard under 112(d)(2) can be satisfied by using the alternative GACT procedure specified in 112(d)(5). As a result, setting GACT under 112(d)(5) meets the 112(c)(6) requirement to regulate under 112(d)(2).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: A. Steven Young
Commenter Affiliation: Association of Independent Corrugated Converters
Document Control Number: EPA-HQ-OAR-2006-0790-1994.1
Comment Excerpt Number: 4

Comment: EPA should also establish annual tune-up work practice as the MACT standard for biomass boilers. For example, in the forest products industry alone, the estimated cost of complying with the proposed HAP emissions limitations for biomass boilers is \$3.3 billion. This is an extraordinary cost that, in the context of the forest products industry, equals or exceeds the magnitude of the economic burden that EPA predicts for the Gas 1 subcategory. Similarly severe economic impacts are expected in other industry sectors where biomass boilers are widely use, such as the furniture, sugar, and agricultural products industries. Thus, there is strong economic justification for prescribing work practice standards for biomass boilers in lieu of numeric emissions limitations.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Mat Ehrhardt
Commenter Affiliation: California Air Pollution Control Officers Association
Document Control Number: EPA-HQ-OAR-2006-0790-1995.1
Comment Excerpt Number: 5

Comment: Carbon monoxide vs. Hazardous Air Pollutants:

As noted above, five of the twelve BTE plants in the San Joaquin Valley would violate the proposed CO-based MACT standard, yet all have been found to be insignificant-risk sources. This calls into question the very foundation of the MACT standard – the assumption that lower CO emissions necessarily relate directly to the resulting non-dioxin organic risk. We believe that, if a surrogate is used in a MACT standard, EPA should allow a facility-specific health-risk based exemption from these MACT standards or should allow for a programmatic equivalency.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: John Ledger
Commenter Affiliation: Associated Oregon Industries
Document Control Number: EPA-HQ-OAR-2006-0790-2024.1
Comment Excerpt Number: 5

Comment: EPA should also establish annual tune-up work practices as the MACT standard for biomass boilers. For example, in the forest products industry alone, the estimated cost of complying with the proposed HAP emissions limitations for biomass boilers is \$3.3 billion. This is an extraordinary cost.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jim Griffin

Commenter Affiliation: American Chemistry Council

Document Control Number: EPA-HQ-OAR-2006-0790-1925.1

Comment Excerpt Number: 5

Comment: Section 112(d)(5) establishes a special rule for area source standards. It provides, “With respect to categories and subcategories of area sources listed pursuant to [112(c)], the Administrator may, in lieu of the authorities provided in [112(d)] ... elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources.” In other words, EPA may establish “GACT” standards for area sources rather than “MACT” standards under 112(d)(2). The statute does not define a method for establishing GACT standards. EPA construes this authority as providing more flexibility than the MACT standard setting process - perhaps most importantly, EPA has concluded that it can consider costs and economic impacts in determining GACT.

When setting area source standards for 112(c)(6) pollutants, EPA has interpreted the requirement to set “standards under subsection (d)(2) or (d)(4)” as requiring MACT (or an alternative health-based standard) to be set for the pollutants. EPA has asserted that the specific reference to 112(d)(2) and (d)(4) prevents the Agency from using the GACT authority that is otherwise available under 112(d)(5). See, e.g., 72 Fed. Reg. 53814, 53815-53816 (Sept. 20, 2007). And, because cost cannot be considered in the first instance in determining MACT, this interpretation will cause certain of the area source standards for 112(c)(6) pollutants to be more stringent than they otherwise would be if GACT were applied.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Daniel Moss

Commenter Affiliation: Society of Chemical Manufacturers and Affiliates

Document Control Number: EPA-HQ-OAR-2006-0790-2018.1

Comment Excerpt Number: 6

Comment: The costs that would be entailed by imposing emission limitations on smaller existing boilers, rather than work practice standards, are illustrated by the comments of one

SOCMA member on the cost implications of the proposed major and area source standards for the larger coal-fired boilers on his facilities:

The stricter standards for coal fired boilers are going to be an issue. We have two plants that burn coal [For the larger plant] the rate heat input is over 100MMBTU/hr but we have never run it over 70, so stack testing will be an issue unless we can de-rate the boiler. In addition, we have never stack tested for furan/dioxin or CO. We have tested for PM, HCl and Hg. We were going to need to spend \$500,000 three years ago under the previous Boiler MACT regulation. These stricter limits are likely going to cause more money to be spent and we will have to weigh the additional operating and capital cost against a switch to natural gas. Natural gas costs us three times what coal does.

[The other plant] has a 90MMBTU/HR boiler that they only run at 24 - 42 MMBTU/hr rates, which causes them to blow off a lot of excess steam when they have to do a stack test. In addition, they also have a gas-fired boiler that is also permitted to burn fuel oil although they haven't done so for more than 5 years. They are an area source so they would only need to comply with Hg and CO. It will cost \$1.5 – 2 million for them to comply with Hg and they have never tested for CO.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Elizabeth E. Bass

Commenter Affiliation: Tuolumne County

Document Control Number: EPA-HQ-OAR-2006-0790-2250

Comment Excerpt Number: 6

Comment: Relying on work practice requirements such as tune ups or providing fuel analyses to ascertain compliance of boiler operations can be much more cost effective and can ensure compliance, especially for small boilers. Boiler manufacturers should be proactive in providing test data for boilers with similar fuels and operations. EPA should consider the use of industry source test data or pooled source test data as an alternative to annual source testing. This would potentially eliminate the need for businesses (particularly small businesses) to pay for expensive compliance tests, provided work practice standards are being met. This approach would potentially mitigate some of the impacts of rulemaking on small businesses consistent with the Regulatory Flexibility Act and the SBAR Panel's recommendations.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jim Griffin

Commenter Affiliation: American Chemistry Council

Document Control Number: EPA-HQ-OAR-2006-0790-1925.1

Comment Excerpt Number: 6

Comment: Section 112(c)(6) identifies seven specific HAPs and requires EPA to “list categories and subcategories of sources assuring that sources accounting for not less than 90 per centum of the aggregate emissions of each such pollutant are subject to standards under subsection (d)(2) or (d)(4).” In 1998, EPA published a notice identifying the source categories that would need to be regulated to satisfy 112(c)(6). 63 Fed. Reg. 17838 (Apr. 10, 1998). EPA did not distinguish between area sources and major sources in the notice.

In the preamble to this proposed rule, EPA explains that the 112(c)(6) list of source categories currently includes industrial coal combustion, industrial oil combustion, industrial wood combustion, commercial coal combustion, commercial oil combustion, and commercial wood combustion. 75 Fed. Reg. 31898. Based on further analysis performed in conjunction with the proposal, however, EPA concludes that it only “must regulate POM from coal-fired, biomass-fired, and oil-fired area source boilers” and that it “only need[s] coal-fired area source boilers to meet the 90 percent requirement set forth in section 112(c)(6) for mercury.” Id. at 31907. EPA believes that it must develop MACT standards for these pollutants and subcategories because 112(c)(6) requires standards “under section 112(d)(2) or 112(d)(4).” Id. at 31917.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Keith A. Craig

Commenter Affiliation: Pennsylvania Hardwoods Development Council

Document Control Number: EPA-HQ-OAR-2006-0790-2017.1

Comment Excerpt Number: 6

Comment: We request that the Environmental Protection Agency revise the proposed Boiler MACT rule to:

Allow for the use of section 112 (d) (4) of the Clean Air Act on a facility by facility basis without unnecessarily complicated procedures restricting its use.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jim Griffin

Commenter Affiliation: American Chemistry Council

Document Control Number: EPA-HQ-OAR-2006-0790-1925.1

Comment Excerpt Number: 7

Comment: EPA's proposal to impose MACT standards on mercury emissions from coal-fired area source boilers and POM emissions from coal-fired, biomass-fired, and oil-fired area source boilers is legally unfounded because EPA has discretion to impose GACT or management practice standards for these pollutants and subcategories. The Agency's failure to acknowledge this discretion renders its legal justification per se arbitrary and capricious and not in accord with the law. *Prill v. NLRB*, 755 F.2d 941, 948 (D.C. Cir. 1985) ("[A]n agency regulation must be declared invalid, even though the agency might be able to adopt the regulation in the exercise of its discretion, if it "was not based on the [agency's] own judgment but rather on the unjustified assumption that it was Congress' judgment that such [a regulation is] desirable." *FCC v. RCA Communications, Inc.*, 346 U.S. 86, 96, 73 S.Ct. 998, 1005, 97 L.Ed. 1470 (1953).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Daniel Moss

Commenter Affiliation: Society of Chemical Manufacturers and Affiliates

Document Control Number: EPA-HQ-OAR-2006-0790-2018.1

Comment Excerpt Number: 7

Comment: Finally, SOCMA would require EPA to treat new small sources to comply with work practice standards. EPA admits that total compliance costs "would likely exceed 3% of the average firm revenues for some new facilities," thus indicating that "the annual costs for testing and monitoring alone may have a significant adverse economic impact" on these facilities. The fact that new facilities "have the added flexibility of including compliance costs into their design and planning," as pointed out by EPA, does not make the ongoing "significant adverse economic impact" of compliance costs on these facilities any less significant.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Bruce A. Steiner

Commenter Affiliation: American Coke and Coal Chemicals Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2007

Comment Excerpt Number: 7

Comment: In situations where the use of Generally Available Control Technology (GACT) is authorized (as it is here), §112(d)(5) of the Clean Air Act on its face authorizes EPA to establish "standards or requirements which provide for the use of generally available control technologies or management practices." (Emphasis added). In other words when setting standards based on GACT, EPA is expressly authorized to establish work practices instead of emissions limitations. There is no need under the express terms of §112(d)(5) for EPA to make a showing under §112(h) in order to set work practice standards. This interpretation is supported

by the legislative history of §112 (Please see submittal for reference to a special report to congress on GACT) and is reflected in numerous existing GACT standards (please see submittal for reference to a federal register describing methods of determining GACT for 7 area source categories).

For purposes of the Proposed Rule, EPA has ample justification to establish a work practice for all relevant HAPs requiring periodic tune-up of affected boilers. As EPA explains in the proposal, this approach is appropriate for mercury (Hg) because Hg is a fuel-dependent HAP and “[f]uel usage can be reduced by improving the combustion efficiency of the boiler.”

Similarly, EPA asserts that, “A boiler tune-up requirement would potentially result in the same non-mercury metallic HAP reduction as a PM emission limit based on performance of multiclones but would also reduce emissions of organic HAP.” Thus, a requirement for affected boilers to be periodically tuned up is amply justified.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jim Pettiford

Commenter Affiliation: Fulton Thermal Corp

Document Control Number: EPA-HQ-OAR-2006-0790-2192.1

Comment Excerpt Number: 7

Comment: The proposed rule would require annual tune-ups for boilers of less than 10 MMBTU per hour capacity. We support such requirement as tune-ups can be very cost-effective in reducing both emissions and fuel consumption. We would nevertheless encourage USEPA to establish an administrative process that is not unduly burdensome on owners of such boilers. We would specifically recommend that tune-up reports need only be maintained on file at the boiler location and that building owners not be required to submit such reports to USEPA.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Al Hankins, Jr.

Commenter Affiliation: Hankins Lumber Company, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1841.1

Comment Excerpt Number: 8

Comment: We believe EPA should abandon the proposed numerical CO limits for area source boilers, and use work practices exclusively. Good combustion practices and tune-up requirements will achieve the same result with far lower cost. It is within EPA’s legal bounds to develop this standard such that it will not further burden facilities that are already suffering from a devastating economy.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Richard Rosvold

Commenter Affiliation: Xcel Energy Services, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-2259.1

Comment Excerpt Number: 8

Comment: We question whether the EPA can require an energy evaluation of the entire facility. The purpose of this regulation is to reduce HAP emissions from boilers. Thus, an evaluation of the boiler, the heat exchangers, and other systems powered by the boiler could be subject to such a work practice standard. However, electrical systems, compressed air systems, and other energy production or energy transfer systems at these facilities are not associated with the boiler. Requiring an energy evaluation of these systems would not lead to a reduction in the emissions from the boilers. The EPA needs to clarify that the energy assessment applies only to the boiler and the systems directly associated with the boiler.

Cost effectiveness is only one factor used in the evaluation of capital spending. Other factors, many unrelated to cost, can influence the decision to make capital improvements. Even though "cost effective" may be defined as having a payback period of two years or less, it is not appropriate to require the facility to make these identified changes based solely on the payback period. Thus, the energy assessment should be used as an advisory tool only.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: William Rogers

Commenter Affiliation: DTE Energy

Document Control Number: EPA-HQ-OAR-2006-0790-2159.1

Comment Excerpt Number: 8

Comment: We would also suggest that, for natural gas fired equipment, the work practices standard be raised from those boilers less than 10 MMBtu, to boilers of a significantly greater capacity. Such units can be well served utilizing work practices rather than emissions standards.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jim Griffin

Commenter Affiliation: American Chemistry Council

Document Control Number: EPA-HQ-OAR-2006-0790-1925.1

Comment Excerpt Number: 8

Comment: EPA's MACT proposal for the 112(c)(6) pollutants also is flawed because the Agency provides no basis for its assertion that mercury and POM must be regulated under this standard in order to satisfy the requirement that 90% of nationwide emissions of these pollutants must be regulated under 112 standards. In 1998, when EPA published the list of source categories that to be regulated to meet the 112(c)(6) 90% control requirement, the Agency did not draw firm conclusions as to whether any area source categories needed to be regulated. Instead, EPA explained that it "will determine whether specific regulation of the area source component of a source category is appropriate, or necessary to meet the 90 percent goal, based on more source category-specific data collected as part of the regulatory process." [FOOTNOTE: 63 Fed. Reg. 17838, 17842 (Apr. 10, 1998).]

With regard to POM, the proposed rule and supporting documentation provides no such additional analysis justifying the need to regulate area source POM emissions to satisfy the 90% goal. The preamble simply asserts, with no further analysis or supporting information, that "[w]e continue to believe that we must regulate POM from coal-fired, biomass-fired, and oil-fired area source boilers in order to meet the requirement in section 112(c)(6)." [FOOTNOTE: 75 Fed. Reg. at 31904.] In light of the failure of the 1998 notice to provide justification for regulating area source categories, this conclusory assertion does not provide a rational basis or adequate factual justification to support the proposed determination that area source industrial boilers must be regulated, and regulated with MACT, to satisfy the 112(c)(6) 90% requirement.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Bruce A. Steiner

Commenter Affiliation: American Coke and Coal Chemicals Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2007

Comment Excerpt Number: 8

Comment: In addition to our comments regarding the application of the Proposed Rule to coke oven gas-fired boilers, we wish to comment generally on EPA failure to justify the need to regulate area source industrial boilers.

EPA's MACT proposal for the §112(c)(6) pollutants is flawed because the agency provides no basis for its assertion that mercury (Hg) and polycyclic organic matter (POM) must be regulated under this standard in order to satisfy the requirement that 90% of nationwide emissions of these pollutants must be regulated under §112 standards. In 1998, when EPA published the list of source categories that must be regulated to meet the §112(c)(6) 90% control requirement, the agency did not draw firm conclusions as to whether any area source categories needed to be regulated. Instead, EPA explained that it "will determine whether specific regulation of the area source component of a source category is appropriate, or necessary to meet the 90 percent goal, based on more source category-specific data collected as part of the regulatory process." [63 Fed. Reg. 17838, 17842 (Apr. 10, 1998)]

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Christopher S. Colman

Commenter Affiliation: Hess Corp.

Document Control Number: EPA-HQ-OAR-2006-0790-2168.1

Comment Excerpt Number: 8

Comment: Oil combustion at area sources is an insignificant contributor of HAPS.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jim Griffin

Commenter Affiliation: American Chemistry Council

Document Control Number: EPA-HQ-OAR-2006-0790-1925.1

Comment Excerpt Number: 9

Comment: Similarly, with regard to mercury, the preamble to this proposed rule states that “based on the information we have learned to date as we are developing standards for various source categories, such as major source boilers, gold mines, commercial and industrial solid waste incinerators, and other categories, we believe that we only need coal-fired area source boilers to meet the 90 percent requirement set forth in section 112(c)(6) for mercury.”[FOOTNOTE: 75 Fed. Reg. at 31904.] The area source MACT floor memo further explains that:

EPA estimates that they have subjected to regulation or propose to regulate 90.3 percent of the 172.3 tons in the 1990 emissions inventory for mercury. Coal-fired area source boilers would provide an additional 0.72 percent. Regulation of these boilers under MACT would provide an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met.[FOOTNOTE: MACT Floor Memo EPA-HQ-OAR-2006-0790-0049 at 2.]

To begin, neither the proposed rule nor the MACT floor memo provide the data that support the proposed determination that 90.3 percent of the 1990 emissions inventory for mercury is subject to regulation. The proposed rule simply makes a conclusory assertion that is unsupported by facts or relevant information, which renders any final action based on this assertion invalid for failure to provide adequate record support.

Assuming for the sake of argument that the analysis is correct and adequately supported, 112(c)(6) does not obligate EPA to regulate in order to provide “an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met.” EPA has either exceeded the 90%

standard or not. When the facts show that the 90% standard is met, EPA has satisfied its 112(c)(6) obligation. When the facts are not sufficient for EPA to reliably draw conclusions, EPA's obligation is to seek the additional information necessary to determine whether additional regulations are needed to meet the 90% standard. EPA's obligation to provide record support for its regulatory decisions is turned on its head by the assertion that the lack of facts or uncertainty as to the available information justifies additional regulation under 112(c)(6).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Michael Wagner

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2271

Comment Excerpt Number: 9

Comment: Rely more on work practice standards and less on emission limits.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Christopher S. Colman

Commenter Affiliation: Hess Corp.

Document Control Number: EPA-HQ-OAR-2006-0790-2168.1

Comment Excerpt Number: 9

Comment: Environmental gains from this rule will be minimal at a relatively high cost and area source standards can clearly consider the impact of these costs in setting standards.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Bruce A. Steiner

Commenter Affiliation: American Coke and Coal Chemicals Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2007

Comment Excerpt Number: 9

Comment: With regard to POM, the Proposed Rule and supporting documentation provides no such additional analysis justifying the need to regulate area source POM emissions to satisfy §112(c)(6). The preamble simply asserts, with no further analysis or supporting information, that “[w]e continue to believe that we must regulate POM from coal-fired, biomass-fired, and oilfired

area source boilers in order to meet the requirement in section 112(c)(6)”[75 Fed. Reg. at 31904]. In light of the failure of the 1998 notice to provide justification for regulating area source categories, this conclusory assertion does not provide a rational basis or adequate factual justification to support the proposed determination that area source industrial boilers must be regulated to satisfy the §112(c)(6) 90% requirement.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Bruce A. Steiner

Commenter Affiliation: American Coke and Coal Chemicals Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2007

Comment Excerpt Number: 10

Comment: With regard to Hg, the preamble to the Proposed Rule states that “based on the information we have learned to date as we are developing standards for various source categories, such as major source boilers, gold mines, commercial and industrial solid waste incinerators, and other categories, we believe that we only need coal-fired area source boilers to meet the 90% requirement set forth in section 112(c)(6) for mercury.”[75 Fed. Reg. at 31904] The area source MACT floor memo further explains that:

EPA estimates that they have subjected to regulation or propose to regulate 90.3 percent of the 172.3 tons in the 1990 emissions inventory for mercury. Coal- fired area source boilers would provide an additional 0.72 percent. Regulation of these boilers under MACT would provide an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met. [MACT Floor Memo at 2]

Assuming for the sake of argument that the analysis is correct and adequately supported, §112(c)(6) does not obligate EPA to regulate in order to provide “an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met.” EPA has either exceeded the 90% standard or not. When the facts show that the 90% standard is met, EPA has satisfied its §112(c)(6) obligation. When the facts are not sufficient for EPA to reliably draw conclusions, EPA’s obligation is to seek the additional information necessary to determine whether additional regulations are needed to meet the 90% standard. EPA’s obligation to provide record support for its regulatory decisions is turned on its head by the assertion that the lack of facts or uncertainty as to the available information justifies additional regulation under §112(c) (6).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jim Griffin

Commenter Affiliation: American Chemistry Council

Document Control Number: EPA-HQ-OAR-2006-0790-1925.1

Comment Excerpt Number: 10

Comment: EPA's position that it cannot use GACT to regulate HAP emissions from area source categories that are subject to 112(c)(6) suffers from two fundamental flaws. The first problem is that it ignores the language in 112(d)(5) that defines the scope of the Agency's authority to use GACT. Section 112(d)(5) expressly states that EPA is authorized to use GACT "[w]ith respect to categories and subcategories of area sources listed pursuant to [112(c)]."

The CAA provides only two ways for EPA to list an area source category for purposes of regulating HAP emissions from that category. First, 112(c)(3) – which is entitled "Area Sources" – provides that EPA "shall list" area source categories "which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section." Second, as explained in detail above, 112(c)(6) authorizes EPA to "list categories and subcategories of sources" – including area sources – as necessary to meet the specified aggregate control requirement for the seven listed HAPs.

Since all area source categories – including those listed under 112(c)(6) – are listed "pursuant to 112(c)," EPA has authority under the express terms of 112(d)(5) to use GACT in regulating area source categories listed and regulated under 112(c)(6).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jim Griffin

Commenter Affiliation: American Chemistry Council

Document Control Number: EPA-HQ-OAR-2006-0790-1925.1

Comment Excerpt Number: 11

Comment: The problem with EPA's position is that it ignores the language in 112(d)(5) authorizing EPA to use the GACT method "in lieu of" the 112(d)(2) MACT procedure. EPA itself has observed that the term "in lieu of" is commonly understood to mean "in place of" and, thus, has correctly concluded that, "CAA section 112(d)(5) authorizes EPA to promulgate standards under CAA section 112(d)(5) that provide for the use of generally available control technologies or management practices (GACT), instead of issuing MACT standards pursuant to CAA section 112(d)(2) and (d)(3)." 73 Fed. Reg. at 1920-1921. In short, the statute plainly states that the requirement to set a standard under 112(d)(2) can be satisfied by using the alternative GACT procedure specified in 112(d)(5). As a result, setting GACT under 112(d)(5) meets the 112(c)(6) requirement to regulate under 112(d)(2).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Christy Sammon

Commenter Affiliation: Southeastern Lumber Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1954.1

Comment Excerpt Number: 12

Comment: EPA should eliminate the CO limit for area source biomass boilers.

As discussed previously, the CO limit contained in the proposed rule is incorrect for several reasons. EPA should consider eliminating the CO limit for area source biomass boilers and replacing the limit with a work practice requiring periodic boiler tune-ups and good combustion practices.

EPA has proposed the CO limit as a surrogate for organic HAPs such as polycyclic organic matter (POM). However, EPA has not demonstrated that control of the low levels of organic HAP emitted by area source biomass boilers must be accomplished in order to meet the 90% required level of control for urban air toxics contained in the statute. Most area source biomass boilers are not located in urban areas and are, therefore, not significant contributors to urban air toxics. This provides further support for the use of work practices, rather than a CO limit, as the reasonable approach to controlling potential emissions of organic HAPs at area sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jim Griffin

Commenter Affiliation: American Chemistry Council

Document Control Number: EPA-HQ-OAR-2006-0790-1925.1

Comment Excerpt Number: 12

Comment: Although EPA has not provided a full explanation of its reasoning in this proposed area source rule or in any of the prior 112(c)(6) area source rules, it seems apparent that the Agency is concerned that the express reference in 112(c)(6) to standards under 112(d)(2) and (d)(4) is meaningless unless it is construed as an unavoidable obligation to set MACT (or a health based standard) for the 112(c)(6) pollutants. In other words, the reference to 112(d)(2) and (d)(4) might be “mere surplusage” if it were construed as simply reiterating the standard-setting obligation that otherwise already exists for listed area source categories under 112.

However, there are other reasonable explanations for this language that avoid the problems described above with EPA’s interpretation. In particular, the requirement to regulate under 112(d)(2) or 112(d)(4) could be interpreted as an obligation for EPA to establish pollutant specific standards for each of the seven HAPs listed in 112(d)(6). Congress itself provided that EPA must regulate close to 200 individual HAPs. It is reasonable to assume that Congress recognized that, of practical necessity, EPA likely would resort to the use of pollutant categories or surrogate indicators when setting 112 standards. In this context, it would have been wholly appropriate for Congress to emphasize the need for pollutant-specific standards to assure that specific and appropriate standards were developed for seven of the most problematic HAPs. Support for this interpretation is found in 129(a)(4), where Congress insisted that EPA “specify numerical emissions limitations” for a specific list of pollutants emitted by waste incinerators.

This is a clear signal that Congress assigned a certain greater benefit to pollutant-specific emissions standards.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Jim Griffin

Commenter Affiliation: American Chemistry Council

Document Control Number: EPA-HQ-OAR-2006-0790-1925.1

Comment Excerpt Number: 13

Comment: EPA should implement “GACT” instead of “MACT” in all cases where GACT is authorized and appropriate. Section 112(d)(5) authorizes EPA to establish standards for area sources based on GACT(rather than MACT and residual risk standards under subsection (f) of 112), or management practices. The language Congress chose to use in this section is instructive in its breadth and generality. First, GACT is not defined, which means that EPA has significant discretion in determining what constitutes GACT and, in any event, is not tied to the formulaic MACT floor setting processes under 112(d)(2) and (3) which are driving unreasonable results that are not representative of emissions performance achieved in practice by area sources. Second, EPA may establish GACT standards and in so doing is not required also to review or promulgate residual risk standards for area sources regulated under GACT. See 112(f)(5). Even if the Agency were to be able to justify the need to regulate certain area sources under 112(c)(6) and do so using MACT for certain the pollutants specified in 112(c)(6)), the sheer number and diversity of sources in certain area sources categories, such as industrial boilers, warrant a finding by EPA that work practice standards under 112(h) are appropriate and justified. EPA has made similar decisions in other NESHAP. [FOOTNOTE: NESHAP for Area Sources: Acrylic and Modacrylic Fibers Production, Carbon Black Production, Chemical Manufacturing: Chromium Compounds, Flexible Polyurethane Foam Production and Fabrication, Lead Acid Battery Manufacturing and Wood Preserving; 72 Fed. Reg. 38864.]

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Christy Sammon

Commenter Affiliation: Southeastern Lumber Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1954.1

Comment Excerpt Number: 13

Comment: The EPA should retain the health-based compliance option (HBCO) contained in the original Boiler MACT rule.

The basis of the original HBCO was that it was a waste of resources to require expensive controls in situations where the source presented no significant health and environmental risk. The EPA has not explained why it has abandoned this reasonable approach.

The statute, at paragraph 112(c)(9), plainly gives EPA the authority to not require controls on source categories that present no appreciable risk. This suggests that Congress intended that EPA need not require controls on sources that are very low risk.

Many of our members were able to meet the very conservative low risk provisions in the original Boiler MACT and this option should be retained in the major source rule and should be included in some form in the area source rule if numerical limits remain a part of the rule.

Without a health-based compliance option, many of our members will be faced with the prospect of having to close their facilities because of the inability to spend the required millions of dollars to attempt to meet the proposed limits, or to purchase natural gas boilers, which would cost less than the required controls, and face huge increases in operating costs as a result. These increased costs would make the U.S. wood products industry uncompetitive with mills in Canada and elsewhere around the world. The wood products industry is one of the largest industrial employers in the southeastern states, and these high paying jobs are put at risk if unjustified and unreasonable limits are imposed.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Regina Hopper

Commenter Affiliation: America's Natural Gas Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1998.1

Comment Excerpt Number: 17

Comment: ANGA Supports EPA's Proposal to Establish Work Practice Standards

As the Agency recognizes, Section 112(h) of the Clean Air Act gives EPA the authority to prescribe work practice standards in lieu of an emission standard where it is not feasible, in the judgment of the Administrator, to prescribe or enforce such an emission standard. [Footnote: 42 U.S.C. § 7412(h).] Section 112(h)(2)(B) further defines the term "not feasible" in this context to apply when "the application of measurement technology to a particular class of sources is not practicable due to technological and economic limitations." [Footnote: 42 U.S.C. § 7412(h)(2)(B)]

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Martin T. Booher

Commenter Affiliation: Ethan Allen Interiors, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1974.1

Comment Excerpt Number: 17

Comment: As noted, Ethan Allen believes that the proposed emissions standards for existing biomass- and oil-fired area sources are technically infeasible and economically unreasonable. In addition, Ethan Allen believes that the exemption for biomass-fired boilers because of the remote location of most biomass-fired area source boilers, control requirements imposed to limit emissions from these sources would not contribute to achieving EPA's stated goals. Most biomass-fired boilers are in remote, non-urban locations, far away from population centers. This also applies to many area source oil-fired boilers. However, the stated purpose of EPA's present rulemaking is to reduce "urban" HAPs. See 75 Fed. Reg. 31,898; 42 U.S.C. § 7412(c)(3). Accordingly, EPA has modeled its calculations of health costs on data obtained from areas of high population density. As a result, the agency incorrectly overestimates the value of emissions reductions from boilers in rural areas. Controlling these typically remote sources would not effectively reduce HAPs in urban areas, and EPA cannot justify the proposed limits for these sources.

Ethan Allen believes that EPA should use its authority under Section 112(d)(4) of the Clean Air Act ("CAA") to design risk-based standards to account for the large population of source boilers in remote areas. Under CAA § 112(d)(4), EPA may consider established health thresholds when setting emissions standards. 42 U.S.C. § 7412(d)(4). Because a majority of area source biomass- and oil-fired boilers are located away from population centers, it is highly unlikely that any reduction of HAP will have an effect on health thresholds of these pollutants for the purposes of urban air quality. As such, EPA should therefore consider requiring site-specific testing (including risk assessment techniques) to confirm whether imposing HAP emission limits is necessary to protect human health. Such a risk-based approach is reasonable under the circumstances and would greatly reduce the anticipated financial impact of the proposed rule on industry.

In light of the foregoing, Ethan Allen believes that EPA should use its authority under CAA § 112(d)(4) to adopt risk-based standards that would allow site-specific risk assessments to be performed for boilers that are not located in urban areas and which would therefore pose negligible risk to human health.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Christy Sammon

Commenter Affiliation: Southeastern Lumber Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1954.1

Comment Excerpt Number: 17

Comment: In the proposed rule for area sources, EPA has pursued a MACT approach rather than the generally available control technologies (GACT), or management practices, approach generally used for area source rulemakings.

In the proposal, EPA appears to take the position that it must use a MACT approach, but this position is in conflict with its historic use of GACT, including work practice standards, for emissions of these same HAPs in other area source rulemakings. It has been demonstrated that the use of the MACT approach for the development of CO standards for area source biomass boilers is flawed, and the Agency should abandon this approach and adopt a work practice approach for area source biomass boilers.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Kevin M. Dempsey

Commenter Affiliation: American Iron and Steel Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2061

Comment Excerpt Number: 19

Comment: For Units Not Exempted, the Standard for Area Source Industrial Boilers Should Consist of Work Practices Rather Than Numeric Emissions Limitations

In situations where the use of Generally Available Control Technology (GACT) is authorized (as it is here), 112(d)(5) of the Clean Air Act on its face authorizes EPA to establish “standards or requirements which provide for the use of generally available control technologies or management practices.” (Emphasis added). In other words when setting standards based on GACT, EPA is expressly authorized to establish work practices instead of emissions limitations. There is no need under the express terms of 112(d)(5) for EPA to make a showing under 112(h) in order to set work practice standards. This interpretation is supported by the legislative history of 112 [Footnote: See, S. Rep. No. 101-228, 101st Cong. 1st sess. 171-172 (GACT is to encompass “methods, practices and techniques which are commercially available and appropriate for application by the sources in the category”).] and is reflected in numerous existing GACT standards. [Footnote: See, e.g., 72 Fed. Reg. 16636, 16639 et seq. (Apr. 4, 2007) (describing methods of determining GACT for 7 area source categories).]

For purposes of the industrial boiler Area Source Rule, EPA has ample justification to establish a work practice for all relevant HAPs requiring periodic tune-up of affected boilers. As EPA explains in the proposal, this approach is appropriate for Hg because Hg is a fuel dependent HAP and “[f]uel usage can be reduced by improving the combustion efficiency of the boiler.” [Footnote: 75 Fed. Reg. at 31906.] Similarly, EPA asserts that, “A boiler tune-up requirement would potentially result in the same non-mercury metallic HAP reduction as a PM emission limit based on performance of multiclones but would also reduce emissions of organic HAP.” [Footnote: 75 Fed. Reg. at 31908.] Thus, a requirement for affected boilers to be periodically tuned up is amply justified.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Daniel Moss

Commenter Affiliation: Society of Chemical Manufacturers and Affiliates

Document Control Number: EPA-HQ-OAR-2006-0790-2018.1

Comment Excerpt Number: 19

Comment: EPA correctly chose to require GACT, not MACT, where it had the discretion to do so.

Does EPA need to use MACT for POM emissions?

SOCMA is aware that EPA believes it is required by CAA Section 112(c)(6) to require MACT levels of control for units accounting for 90% of 1990 emissions of Hg and polycyclic organic matter (POM). (The comments of the American Chemistry Council (ACC) explain why this is not necessarily the case.) In its discussion of Hg emissions, EPA points out that coal-fired area source boilers account for 4.3% of 1990 emissions, while oil and biomass-fired units account for one-hundredth of that amount (0.34%). [Footnote: 75 Fed. Reg. at 31898.] Requiring the latter to meet MACTbased standards would not materially improve EPA's coverage of Hg emissions, and would be an extremely cost-ineffective way of reducing what are by any standard very minor emissions. SOCMA therefore supports EPA's choice of GACT to control Hg emissions from these units.

EPA has not, however, presented a similar analysis for POM. Does EPA still need, at this point, to regulate area source boilers in order to capture 90% of the 1990 emissions of POM? And, if it does, what are the relevant percentages of the 1990 inventory of POM emissions generated respectively by coal, oil and biomass-fired units? Depending on the answer to these questions, EPA might not need to require MACT levels of control from POM emissions from these units.

This is not an academic issue – the proposed CO levels that EPA has set for existing units are quite stringent, and are barely achievable for units burning #6 fuel oil.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Alicia Oman

Commenter Affiliation: National Association of Manufacturers

Document Control Number: EPA-HQ-OAR-2006-0790-2234.1

Comment Excerpt Number: 60

Comment: EPA is authorized to set GACT standards for POM and Hg.

Section 112(c)(6) of the CAA identifies seven specific HAPs and requires EPA to “list categories and subcategories of sources assuring that sources accounting for not less than 90 per centum of the aggregate emissions of each such pollutant are subject to standards under subsection (d)(2) or (d)(4).” In 1998, EPA published a notice identifying the source categories that would need to be regulated to satisfy 112(c)(6). 63 Fed. Reg. 17838 (Apr. 10, 1998). EPA did not distinguish between area sources and major sources in the notice. With regard to area sources, the Agency explained that it “will determine whether specific regulation of the area source component of a source category is appropriate, or necessary to meet the 90 percent goal, based on more source category-specific data collected as part of the regulatory process.” *Id.* at 17842.

In the Industrial Boiler GACT proposal, EPA explains that, “The CAA section 112(c)(6) list of source categories currently includes industrial coal combustion, industrial oil combustion, industrial wood combustion, commercial coal combustion, commercial oil combustion, and commercial wood combustion.” 75 Fed. Reg. 31898. Based on further analysis performed in conjunction with the proposal, however, EPA concludes that it only “must regulate POM from coal-fired, biomass-fired, and oil-fired area source boilers” and that it “only need[s] coal-fired area source boilers to meet the 90 percent requirement set forth in section 112(c)(6) for mercury.” *Id.* at 31904. EPA believes that it must develop MACT standards for these pollutants and subcategories because 112(c)(6) requires standards “under section 112(d)(2) or 112(d)(4).” *Id.* at 31917.

EPA’s proposal to impose MACT standards on Hg emissions from coal-fired area source boilers and POM emissions from coal-fired, biomass-fired, and oil-fired area source boilers is legally unfounded, because EPA has discretion to impose GACT standards for these pollutants and subcategories. The Agency’s failure to acknowledge this discretion renders its legal justification per se arbitrary and capricious and not in accord with the law. *Pri!! v. NLRB*, 755 F.2d 941, 948 (D.C. Cir. 1985) (“[A]n agency regulation must be declared invalid, even though the agency might be able to adopt the regulation in the exercise of its discretion, if it “was not based on the [agency’s] own judgment but rather on the unjustified assumption that it was Congress’ judgment that such [a regulation is] desirable.” *FCC v. RCA Communications, Inc.*, 346 U.S. 86, 96, 73 S.Ct. 998, 1005, 97 L.Ed. 1470 (1953).”).

As noted above, 112(c)(6) specifies that “standards under subsection (d)(2) or (d)(4)” must be established for the HAP emissions that EPA determines must be regulated to satisfy the aggregate control requirement. Section 112(d)(2) sets out the basic standard setting methodology for 112 HAP emissions standards, requiring “the maximum degree of reduction in emissions of the hazardous air pollutants subject to this section” – i.e., “MACT.” Section 112(d)(3) generally requires “MACT” to be no less stringent than the emissions limitation achieved by the better performing sources in the given source category (for existing sources) or the best controlled similar source (for new sources). With regard to “threshold pollutants,” 112(d)(4) authorizes EPA to forego that formulaic MACT approach and, instead, consider the “threshold level, with an ample margin of safety, when establishing standards” under 112(d).

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Alicia Oman

Commenter Affiliation: National Association of Manufacturers

Document Control Number: EPA-HQ-OAR-2006-0790-2234.1

Comment Excerpt Number: 61

Comment: Section 112(d)(5) establishes a special rule for area source standards. It provides, “With respect to categories and subcategories of area sources listed pursuant to [112(c)], the Administrator may, in lieu of the authorities provided in [112(d)] ... elect to promulgate standards or requirements applicable to sources in such categories or subcategories which provide for the use of generally available control technologies or management practices by such sources.” In other words, EPA may establish “GACT” standards for area sources rather than “MACT” standards under 112(d). The statute does not define a method for establishing GACT standards. EPA construes this authority as providing more flexibility than the MACT standard setting process – perhaps most importantly, EPA has concluded that it “can consider costs and economic impacts in determining GACT.”

When setting area source standards for 112(c)(6) pollutants, EPA has interpreted the requirement to set “standards under subsection (d)(2) or (d)(4)” as requiring MACT (or an alternative health-based standard) to be set for the pollutants. EPA has asserted that the specific reference to 112(d)(2) and (d)(4) prevents the Agency from using the GACT authority that is otherwise available under § 112(d)(5). See, e.g., 72 Fed. Reg. 53814, 53815- 53816 (Sept. 20, 2007). And, because cost cannot be considered in the first instance in determining MACT, this interpretation stands to cause certain the area source standards for § 112(c)(6) pollutants to be more stringent than they otherwise might be if GACT could be applied.

EPA’s position that it cannot use GACT to regulate HAP emissions from area source categories that are subject to 112(c)(6) suffers from two fundamental flaws. The first problem is that it ignores the language in 112(d)(5) that defines the scope of the Agency’s authority to use GACT. Section 112(d)(5) expressly states that EPA is authorized to use GACT “[w]ith respect to categories and subcategories of area sources listed pursuant to [112(c)].” The CAA provides only two ways for EPA to list an area source category for purposes of regulating HAP emissions from the category under 112. First, 112(c)(3) – which is aptly entitled “Area Sources” – provides that EPA “shall list” area source categories “which the Administrator finds presents a threat of adverse effects to human health or the environment ... warranting regulation under this section.”

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Commenter Name: Alicia Oman

Commenter Affiliation: National Association of Manufacturers

Document Control Number: EPA-HQ-OAR-2006-0790-2234.1

Comment Excerpt Number: 62

Comment: As explained in detail above, 112(c)(6) authorizes EPA to “list categories and subcategories of sources” – including area sources – as necessary to meet the specified aggregate control requirement for the seven listed HAPs. Since all area source categories – including those listed under 112(c)(6) – are listed “pursuant to 112(c),” EPA has authority under the express terms of 112(d)(5) to use GACT in regulating area source categories listed and regulated under to 112(c)(6).

A with EPA’s position is that it ignores the language in 112(d)(5) authorizing EPA to use the GACT method “in lieu of” the 112(d)(2) MACT procedure. EPA itself has observed that the term “in lieu of” is commonly understood to mean “in place the of” and, thus, has correctly concluded that, “CAA section 112(d)(5) authorizes EPA to promulgate standards under CAA section 112(d)(5) that provide for the use of generally available control technologies or management practices (GACT), instead of issuing MACT standards pursuant to CAA section 112(d)(2) and (d)(3).” 73 Fed. Reg. at 1920-1921. In short, the statute plainly says that the requirement to set a standard under 112(d)(2) can be satisfied by using the alternative GACT procedure specified in 112(d)(5). As a result, setting GACT under 112(d)(5) meets the 112(c)(6) requirement to regulate under 112(d)(2).

Although EPA has not provided a full explanation of its reasoning in the Industrial Boiler GACT proposal or in any of the prior 112(c)(6) area source standards, it seems apparent that the Agency is concerned that the express reference in 112(c)(6) to standards under 112(d)(2) and (d)(4) would not have meaning unless it were construed as an unavoidable obligation to set MACT (or a health based standard) for the 112(c)(6) pollutants. In other words, the reference to 112(d)(2) and (d)(4) might be “mere surplusage” if it were construed as simply reiterating the standard-setting obligation that otherwise already exists for listed area source categories under 112.

However, there are other rational explanations for this language that avoid the problems with EPA’s interpretation that are described above. In particular, the requirement to regulate under 112(d)(2) or 112(d)(4) could be interpreted as an obligation for EPA to establish pollutant specific standards for each of the seven HAPs listed in 112(d)(6). Congress itself provided that EPA must regulate close to 200 individual HAPs. It is reasonable to assume that Congress recognized that, of practical necessity, EPA likely would resort to the use of pollutant categories or surrogate indicators when setting 112 standards. In this context, it would have been wholly appropriate for Congress to emphasize the need for pollutant-specific standards to assure that specific and appropriate standards were developed for seven of the most problematic HAPs. Support for this interpretation is found in 129(a)(4), where Congress insisted that EPA “specify numerical emissions limitations” for a specific list of pollutants emitted by waste incinerators. This is a clear signal that Congress assigned a certain greater benefit to pollutant-specific emissions standards.

Response: See response to comment EPA-HQ-OAR-2006-0790-0067.1, excerpt 1 for discussion of authority for setting MACT standards for Hg/POM for Area Sources.

Legal/Applicability: Limiting MACT Floor for Mercury to Coal Units

Commenter Name: Margaret E. Sheehan

Commenter Affiliation: Energy Justice Network

Document Control Number: EPA-HQ-OAR-2006-0790-1053.1

Comment Excerpt Number: 1

Comment: EPA should impose MACT-based mercury emission standards for biomass and oil-fired boilers, not just for coal-fired boilers

The rules should require existing biomass boilers to have standards based on MACT for mercury and PM. Existing biomass boiler standards should not be based on GACT for mercury and PM, as proposed. GACT-based standards are less strict than MACT-based standards. MACT-based standards cannot be less stringent than the emission control achieved in practice by the best-controlled similar source, as determined by the Administrator. Alternately, determining what constitutes GACT only involves considering the control technologies and management practices that are generally available to the area sources in the source category.

The proposed rule is based on the assumption that regulating mercury emissions from coal-fired area source boilers will be adequate to meet the 90 percent requirement set forth in the Clean Air Act's section 112(c)(6) for mercury. Coal-fired area source boilers represent approximately 4.3 percent of the 1990 section 112(c)(6) emissions inventory for mercury. *Id.* In contrast, biomass and oil-fired boilers currently represent approximately 0.34 percent. *Id.* The EPA should attempt to minimize the adverse health effects from mercury, even if minimizing this health risk means surpassing the 90 percent requirement for mercury.

Although biomass represents a smaller percentage of (total U.S. mercury boilers) mercury emissions than do coal-fired boilers, the EPA should use stricter, MACT standards for biomass as well as for coal-fired boilers; using MACT standards for all types of boilers will help to minimize the adverse health effects from mercury. Additionally, a study published in *Science*² casts doubt on the reliability of emissions estimates from biomass incineration and suggests that biomass emissions of mercury can be higher than emissions from coal. [See Reference 2 in submittal.] The study shows a complete release of mercury contained in litter and green vegetation fuel that is different and higher than releases reported for some coal and biomass burning. The study suggests the higher releases of mercury are connected to regional differences in mercury concentrations in vegetation that coincide with the known highest dry/wet deposition rates in the northeastern and northwestern United States. Burning biomass with unknown mercury concentrations is a reckless strategy for the public's health.

The potential impact on mercury emissions of the large number of existing and planned biomass plants is significant. How these boilers are regulated will significantly affect the health of the American people and the environment. In its Summary Annual Costs, table 3, the EPA indicates the number of new biomass boilers estimated to come online in the years 2010-13 is 200. The

EPA projects the number of existing biomass units affected by the proposed regulation to be 10,958.

Additionally, some of these new biomass boilers will be in urban or other highly populated areas, such as in Madison, Wisconsin. [See Reference 4 in submittal.] Biomass emissions, such as mercury, pose a high health risk to local populations, particularly the most vulnerable, including the youth, the infirm, and the elderly.

Mercury negatively impacts humans and wildlife. EPA analyses conducted for the Mercury Study Report to Congress [See Reference 5 in submittal.] indicate that, for fetuses, infants, and children, the primary health effect of methylmercury is impaired neurological development. Methylmercury poisoning can also affect adults, and symptoms may include impairment of peripheral vision; disturbances in sensations ("pins and needles" feelings, usually in the hands, feet, and around the mouth); lack of coordination of movements; impairment of speech, hearing, walking; and muscle weakness. The study also suggests that effects of methylmercury exposure on wildlife can include mortality (death), reduced fertility, slower growth and development, and abnormal behavior that can affect survival.

Response:

Commenter Name: Renee Lesjak Bashel

Commenter Affiliation: Small Business Environmental Assistance Programs, SBEAP

Document Control Number: EPA-HQ-OAR-2006-0790-2195.1

Comment Excerpt Number: 3

Comment: Recommendation: Remove the more stringent control and testing requirements for mercury from biomass and oil-fired boilers under 10 MMBTU/hr.

In the federal register section on the rationale of the proposed regulation section G. Alternative MACT

Standards for Consideration, the section states:

“Our analysis of the inventory for mercury under CAA section 112(c)(6) has led us to believe that we do not need to regulate biomass-fired and oil-fired boilers under MACT in order to meet our statutory obligations under this provision.”

Additional testing and control devices should not be required if it is not needed to meet the “90%”

requirement. If it is decided that the biomass and oil fired boiler need to be regulated, serious consideration should be given to not regulating small boilers (less than 10 MMBtu/hr). There can be serious cost impacts for small businesses.

Response:

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 79

Comment: The proposal asks, “We solicit comment on whether we should nevertheless establish MACT-based mercury emission standards for all boilers in this category.”⁶¹ AF&PA does not believe a limit is justified for any of the biomass subcategory sources. The Emissions inventory document developed for all Section 112(c)(6) pollutants shows this source to be responsible for well under 1% of the mercury emissions of all the industrial and commercial sources listed. These sources are extremely minor sources of mercury and further regulation is clearly not justified.

Response:

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 81

Comment: The proposal also asks, “We also solicit comment on MACT-based requirements for mercury emitted from biomass-fired and oil-fired area source boilers in the event comment and further analysis of the inventory demonstrates such regulation is necessary to fulfill the 90 percent requirement under CAA section 112(c)(6) or is otherwise appropriate.” We do not believe such regulation is necessary. The proposal notes that over 90 percent of the emissions identified in §112(c)(6) have already been controlled and that this rule’s coal emission source proposal will add to that total. Additional regulation is therefore, not required by statute and consequently unjustified.

Response:

Commenter Name: Gary Melow

Commenter Affiliation: Michigan Biomass

Document Control Number: EPA-HQ-OAR-2006-0790-1917.1

Comment Excerpt Number: 1

Comment: We agree EPA should not control mercury from biomass boilers under Section 112(c)(6). EPA requests comment on whether mercury emissions from biomass boilers should be

regulated under MACT requirements (75 FR at 31898). All our sources have periodically tested mercury emissions and found mercury emissions to be quite minimal and sometimes not detectable. Some of this data should be available from the data-gathering efforts of EPA, since all but one of our sources responded to EPA's Information Collection Request. (One facility never received the request.) We have conducted testing for mercury using both 100% clean biomass and also with some addition of alternative fuel, such as TDF or creosote treated wood. We have not seen mercury emissions affected by the addition of these alternative fuels. Maximum emissions of mercury from our sources would be a fraction of a pound per year. As previously stated, our power plants range from 16 to 36 MW, on a heat input basis our boilers range from approximately 240 MMBtu/hr to 530 MMBtu/hr. Certainly these would be some of the larger sized boilers regulated under the area source rule. Based on our experience with the very minimal emissions from our relatively large facilities, we agree that the category of biomass fired boilers is not a significant contributor to mercury in the environment.

Response:

Commenter Name: Michael T. Palko

Commenter Affiliation: Pennsylvania Department of Conservation and Natural Resources

Document Control Number: EPA-HQ-OAR-2006-0790-1895.1

Comment Excerpt Number: 6

Comment: The discussion in the draft rule preamble related to mercury from biomass systems is confusing. The discussion from p. 56 seems to contradict previous statements regarding MACT-based controls for mercury only being imposed on coal boilers. The discussion on p. 75 is confusing with regard to mercury emissions from biomass boilers. Also, statements seem to indicate that EPA is willing to consider regulating biomass boilers for mercury emissions through MACT-based emission standards. It should be made clear in the rule that mercury emissions from biomass boilers using unadulterated wood fuel are not a concern.

Response:

Commenter Name: John Donahue

Commenter Affiliation: Sappi Fine Paper North America

Document Control Number: EPA-HQ-OAR-2006-0790-2210.1

Comment Excerpt Number: 2

Comment: EPA's Area Source proposal for the § 112(c)(6) pollutants is flawed because the Agency provides no basis for its assertion that mercury ("Hg") and polycyclic organic matter ("POM") must be regulated under this standard in order to satisfy the requirement that 90% of nationwide emissions of these pollutants must be regulated under § 112 standards. In 1998, when EPA published the list of source categories that must be regulated to meet the § 112(c)(6) 90% control requirement, the Agency did not draw firm conclusions as to whether any area source

categories needed to be regulated. Instead, EPA explained that it “will determine whether specific regulation of the area source component of a source category is appropriate, or necessary to meet the 90 percent goal, based on more source category-specific data collected as part of the regulatory process.” [63 FR 17838, 17842 (Apr. 10, 1998)].

With regard to POM, the proposed Industrial Boiler GACT and supporting documentation provides no such additional analysis justifying the need to regulate area source POM emissions to satisfy § 112(c)(6). The preamble simply asserts, with no further analysis or supporting information, that “[w]e continue to believe that we must regulate POM from coal-fired, biomass-fired, and oil-fired area source boilers in order to meet the requirement in section 112(c)(6).” [75 FR 31904]. In light of the failure of the 1998 notice to provide justification for regulating area source categories, this conclusory assertion does not provide a rational basis or adequate factual justification to support the proposed determination that area source industrial boilers must be regulated to satisfy the § 112(c)(6) 90% requirement.

Similarly, with regard to Hg, the preamble to the area source proposal states that “based on the information we have learned to date as we are developing standards for various source categories, such as major source boilers, gold mines, commercial and industrial solid waste incinerators, and other categories, we believe that we only need coal-fired area source boilers to meet the 90 percent requirement set forth in section 112(c)(6) for mercury.” [75 FR 31904] The area source MACT floor memo further explains that:

EPA estimates that they have subjected to regulation or propose to regulate 90.3 percent of the 172.3 tons in the 1990 emissions inventory for mercury. Coal-fired area source boilers would provide an additional 0.72 percent. Regulation of these boilers under MACT would provide an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met.[MACT Floor Memo at 2.]

To begin, neither the proposed rule nor the MACT floor memo provide data that support the proposed determination that 90.3 percent of the 1990 emissions inventory for mercury is subject to regulation. The proposed rule simply makes a conclusory assertion that is unsupported by facts or relevant information, which renders any final action based on this assertion invalid for failure to provide adequate record support.

Moreover, assuming for the sake of argument that the analysis is correct and adequately supported, § 112(c)(6) does not obligate EPA to regulate in order to provide “an anticipated margin to ensure that the obligations under CAA section 112(c)(6) are met.” EPA has either exceeded the 90% standard or not. When the facts show that the 90% standard is met, EPA has satisfied its § 112(c)(6) obligation. When the facts are not sufficient for EPA to reliably draw conclusions, EPA’s obligation is to seek the additional information necessary to determine whether additional regulations are needed to meet the 90% standard. EPA’s obligation to provide record support for its regulatory decisions is turned on its head by the assertion that the lack of facts or uncertainty as to the available information justifies additional regulation under § 112(c)(6).

Response:

Commenter Name: James L. Kavanaugh

Commenter Affiliation: Missouri Department of Natural Resources
Document Control Number: EPA-HQ-OAR-2006-0790-2251
Comment Excerpt Number: 3

Comment: Page 31910, Alternative Maximum Achievable Control Technology (MACT) Standards for Consideration, of the proposed rule states: "Our analysis of the inventory for mercury under CAA section 112(c)(6) has led us to believe that we do not need to regulate biomass-fired and oil-fired boilers under MACT in order to meet our statutory obligations under this provision."

We recommend not requiring additional testing and control devices if they are not needed to meet the 90 percent requirement. If EPA determines that biomass oil fired oilers need to be regulated, consideration should be given to not regulating small boilers (less than 10 MMBtu) to prevent serious economic impacts on small businesses.

Response:

Commenter Name: Steven W. Koehn
Commenter Affiliation: National Association of State Foresters
Document Control Number: EPA-HQ-OAR-2006-0790-2220.1
Comment Excerpt Number: 3

Comment: The discussion in the draft rule preamble related to mercury from biomass systems is confusing. The discussion from p. 56 seems to contradict previous statements regarding MACT-based controls for mercury only being imposed on coal boilers. The discussion on p. 75 is confusing with regard to mercury emissions from biomass boilers. Also, statements seem to indicate that EPA is willing to consider regulating biomass boilers for mercury emissions through MACT-based emission standards. It should be made clear in the rule that mercury emissions from biomass boilers using unadulterated wood fuel are not a concern.

Response:

Commenter Name: Trent A. Dougherty
Commenter Affiliation: Ohio Environmental Council
Document Control Number: EPA-HQ-OAR-2006-0790-1922.1
Comment Excerpt Number: 10

Comment: Due to the emissions of mercury from biomass boilers, including those that burn so-called "clean woody biomass" – wood that is actually infused with mercury that was released from the legacy coal plants over the past century – there is little scientific, economic, or social justification for exempting biomass boilers from mercury regulations.

Response:

Commenter Name: John Hopewell

Commenter Affiliation: American Coatings Association

Document Control Number: EPA-HQ-OAR-2006-0790-2062.1

Comment Excerpt Number: 17

Comment: EPA will meet the statutory requirement for control of 90% of mercury emissions from the source category under CAA Section 112(c)(6) by establishing limits for coal-fired boilers. EPA therefore proposes to adopt GACT for mercury control of biomass -fired and oil-fired boilers and requests comment on whether this is appropriate. ACA believes that EPA should adopt GACT for biomass-fired and oil-fired boilers for the following reasons:

1. It satisfies the legislative intent and statutory language.
2. It furthers the agency's push for reducing greenhouse gas emissions which the Administrator identified as a priority.[Seven Priorities for EPA's Future." Memorandum to Employees from Lisa P. Jackson. January 12, 2010.] EPA concluded that "the carbon released during stationary source combustion of biomass is recycled as U.S. forests and crops regenerate." [Technical Support Document for Stationary Fuel Combustion Emissions: Proposed Rule for Mandatory Reporting of Greenhouse Gases. U.S. EPA. January 30, 2009. Section 3.3] The same applies to biodiesel which is included as part of the oil subcategory. EPA must therefore take all permissible actions to promote the use of biomass, biodiesel, and other renewable energy sources.

Response:

Commenter Name: Charles B. Jones, III

Commenter Affiliation: Georgia Traditional Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1923.1

Comment Excerpt Number: 21

Comment: It is unclear why EPA needs area source standards in order to meet the CAA Section 112(c)(6) mandate that maximum achievable controls (MACT) be imposed on sources emitting at least 90% of the mercury emissions. EPA takes the position that it only needs coal-fired area source boilers to meet the 90% requirement in Section 112(c)(6) for mercury. According to Table 2 in the proposed rule, EPA expects to achieve reductions of only 1,400 pounds of mercury (0.7 tons) with the proposed rule. GTMA believes this amount of mercury is likely a minute fraction (certainly far less than 10%) of the total mercury emission reductions being achieved by the EGU (power plant) sector alone. EPA should disfavor onerous limitations on minor sources that will lead to hardly any measurable improvement in air quality but likely result in extreme economic consequences for these sources. EPA should consider the burden of such regulations and understand that most area sources (i.e., small businesses) cannot pass their increased costs on to their customers in a highly competitive marketplace.

Response:

Commenter Name: Jim Griffin

Commenter Affiliation: American Chemistry Council

Document Control Number: EPA-HQ-OAR-2006-0790-1925.1

Comment Excerpt Number: 24

Comment: Emission Limits Are Not Needed For Mercury From Biomass And Oil-Fired Boilers. ACC agrees with EPA that emission limits for mercury are not needed for area source oil and biomass boilers. Emissions of mercury from these boilers at area sources are not expected to be significant and make up only 0.34% of the baseline 1990 national emissions inventory, as indicated in the report EPA references in the preamble to the proposed rule: 1990 Emissions Inventory Of Section 112(c)(6) Pollutants. [FOOTNOTE: <http://www.epa.gov/ttn/atw/112c6/final2.pdf>] Emissions controls for mercury from area source liquid and biomass boilers would not be cost effective and would not provide measurable HAP emissions reductions.

Response:

Commenter Name: Martin T. Booher

Commenter Affiliation: Ethan Allen Interiors, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1974.1

Comment Excerpt Number: 25

Comment: EPA should not adopt the discussed regulatory alternative to establish MACT to control emissions of mercury from biomass- and oil-fired boilers. Ethan Allen agrees that mercury emissions are primarily an issue with coal-fired boilers and that the EPA does not need to regulate emissions from biomass- and oil-fired boilers to meet its regulatory obligations. In addition, as discussed above, EPA's data is not sufficiently representative of area source biomass-fired and oil-fired boilers across the country. EPA's data on mercury is even less reflective of the population of biomass-fired boilers given the agency has emissions information on a total of two boilers. As a result, the MACT for mercury is based on a single boiler. Moreover, EPA acknowledges that it does not have any data on mercury emissions from area source oil-fired boilers and thus relied on emissions data from major source oil-fired boilers to establish the alternative mercury MACT for area source boilers. 75 Fed. Reg. 31,910. To rely on this information as the basis for establishing mercury limits for area source boilers would not be reasonable or appropriate.

Response:

Legal/Applicability: Applicability Between 112 and 129 Standards

Commenter Name: N/A

Commenter Affiliation: Sierra Club, Earth Justice, Clean Air Task Force, Natural Resources Defense Council

Document Control Number: EPA-HQ-OAR-2006-0790-1982.1

Comment Excerpt Number: 1

Comment: EPA listed “industrial coal combustion, industrial oil combustion, industrial wood combustion, commercial coal combustion, commercial oil combustion, and commercial wood combustion” under § 112(c)(6) based on their emissions of mercury and POM. 75 Fed. Reg. at 31898. Thus, § 112(c)(6) unambiguously requires it to set § 112(d)(2) or (d)(4) standards for the “sources” in these categories.

EPA takes the position that § 112(c)(6) requires it only to set § 112(d)(2) emission standards for the mercury and POM emissions that sources in the listed categories emit. That position reflects a misreading of the statute. Section 112(c)(6) expressly provides that EPA must “list categories and subcategories of sources assuring that sources accounting for not less than 90 per centum of each [enumerated] pollutant are subject to standards under subsection (d)(2) or (d)(4) of this section.” 42 U.S.C. § 7412(c)(6) (emphasis added). As the D.C. Circuit has held repeatedly, when EPA sets standards for a category or subcategory of sources under § 112(d)(2), it has a clear statutory duty to set emission standards for each hazardous air pollutant that the sources in that category or subcategory emit. E.g., *National Lime Ass’n v. EPA*, 233 F.3d 625, 633-634 (D.C. Cir. 2000). Thus, when EPA sets standards for area source boilers under § 112(d)(2) – as § 112(c)(6) requires it to do – the agency must set § 112(d)(2) emission standards for each hazardous air pollutant that area source boilers emit.

EPA appears to believe that because the agency needs the listed boiler categories only to reach § 112(c)(6)’s ninety percent requirement for mercury and POM, and not for the other pollutants enumerated in § 112(c)(6), EPA’s only obligation under § 112(c)(6) is to set § 112(d)(2) standards for mercury and POM. To the contrary, § 112(c)(6) expressly requires EPA to issue § 112(d)(2) standards for the “sources” in the categories listed under § 112(c)(6), not some subset of the pollutants that those sources emit. As noted above, it is well established that § 112(d)(2) standards must include emission standards for each hazardous air pollutant that a source category emits. Nothing in the Clean Air Act exempts EPA from this requirement just because the category at issue is an area source category listed pursuant to § 112(c)(6) instead of a major source category listed pursuant to § 112(c)(1). Had Congress wished to give EPA discretion to set standards for only some of the pollutants emitted by a category listed under § 112(c)(6), it would have done so expressly. See *New Jersey v. EPA*, 517 F.3d 574, 582 (D.C. Cir. 2008) (EPA could not avoid delisting requirements of § 112(c)(9) just because a source category was listed under § 112(n)(1) instead of § 112(c)(1)).

EPA’s failure to set lawful § 112(d)(2) or (d)(4) standards for area source boilers – i.e., standards for all the hazardous air pollutants these listed sources emit – would not only contravene the Clean Air Act but also violate the Court order in *Sierra Club v. EPA*, No 01-1537 (D.D.C.), which provides “EPA shall promulgate emission standards assuring that sources accounting for

not less than ninety percent of the aggregate emissions of each of the hazardous air pollutants enumerated in Section 112(c)(6) are subject to emission standards under section 112(d)(2) or (d)(4) no later than December 16, 2010.” (emphasis added).

EPA not only fails to propose standards for all the hazardous air pollutants that area source boilers emit, but fails to propose any § 112(d)(2) or (d)(4) emission standards for area source boilers that combust oil and wood. The agency claims it can take this approach because it has recently concluded that it does not need oil- or biomass- fired units to meet the ninety percent requirement in § 112(c)(6). 75 Fed. Reg. at 31898. EPA may not simply decline to set standards for categories that it has listed under § 112(c)(6). To the contrary, if EPA wishes not to set standards for a listed category, it must remove that category from the list. Section 112(c)(9) provides the exclusive procedure for removing categories from the § 112(c) list, but EPA has not availed itself of this procedure and the agency’s proposal does not even mention it. See *New Jersey*, 517 F.3d at 582.

Response: The comment that limits for all pollutants must be based on MACT when a source category is listed pursuant to CAA 112(c)(6) is addressed in the preamble. Emission control levels vary between standards, even for the same type of boiler or incinerator, due to the need to base standards on an analysis of the “floor” for sources within a category. It is possible that standards may vary between the CAA section 129 rules and the area and major source NESHAPs.

The final rule has added provisions to allow units that cease burning solid waste to become subject to this rulemaking. See new paragraph added at §63.11210(e) for discussion of initial compliance requirements.

The determination of what materials are and are not non-hazardous solid waste is part of the Identification of Non-Hazardous Secondary Materials That Are Solid Waste Definitional Rulemaking. Affected sources should consult that rulemaking to make a determination of the materials that are or are not solid waste. The determination of solid waste is outside the scope of the area source boiler rulemaking response to comments.

Commenter Name: Robert H. Colby and G. Vinson Hellwig

Commenter Affiliation: National Association of Clean Air Agencies (NACAA)

Document Control Number: EPA-HQ-OAR-2006-0790-2022.1

Comment Excerpt Number: 8

Comment: MACT LIMITS FOR SIMILAR UNITS SHOULD BE CONSISTENT

New and modified sources subject to section 165 must install “the best available control technology” (BACT) for a number of criteria pollutants regulated under the CAA, including as relevant here CO, SO₂, NO_x and mercury. In the proposed rules EPA is setting limits for certain pollutants based on the application of “the maximum achievable control technology” – MACT. There is nothing in the plain text of the CAA or its legislative history that suggests that Congress intended MACT, which applies to emissions of highly toxic and carcinogenic pollutants, to be

less stringent than BACT, which applies to criteria pollutants. Indeed, for new sources it is clear that Congress intended MACT [Footnote: The MACT floor definition is essentially the same as the definition of LAER, which applies to new and modified sources in non-attainment areas.] to be at least as stringent as the lowest achievable emission rate (LAER), which is generally recognized as being more stringent than BACT.

Regulatory authorities are to consider cost when establishing both BACT and MACT limitations that are more stringent than the MACT floor. There is nothing in the CAA that speaks to how EPA and permitting authorities must weigh cost against other considerations in establishing BACT. However, there has been a substantial body of precedent that speaks to this issue. In contrast, in establishing a requirement for a MACT floor, Congress effectively set a floor on what should be considered reasonable costs for MACT control technologies. Since MACT may be no less stringent than the performance level of the best-performing 12 percent, the cost to those sources of achieving that level of performance (including the worst-performing unit within a subcategory) must be within what was considered to be appropriate for MACT sources in that subcategory. This is of particular relevance to the set of rules under consideration, where the cost of control for similarly situated units is essentially the same but the calculated MACT floors are substantially different.

In its MACT determinations EPA needs to explain how an emission limit imposed for a unit subject to section 129 (and therefore presumably meeting the reasonable cost test for MACT) is not reasonable for an identical unit subject to section 112. Under EPA's proposal those units will be regulated as energy recovery units (under section 129). The PM emission limits for new energy recovery units under section 129 are 500 times higher (less stringent) than those for new incinerators under section 129. EPA should explain why this is the case for its proposed MACT standards. NACAA understands EPA's MACT floor calculation process, but EPA is proposing a MACT standard, not merely calculating a MACT floor. Given this difference in emission limits few sources will elect to be a new "incinerator" of solid waste if they can be classified as some other type of unit (even though the design and operating characteristics of the unit may be unchanged).

PM and mercury limits for existing units are more strict for energy recovery units than for incinerators (50 percent more stringent for PM and a factor of three for mercury). HCl limits are also more stringent for energy recovery units (by a factor of 20), while CO levels are more stringent for incinerators (by a factor of 70). In addition, PM emission limits for new ICI boilers (under section 112) are more stringent than for new energy recovery units (under section 129) (0.001 vs 0.003 lb/MMBtu). For existing coal-fired units the CO limits are also higher under section 129 than under 112 (150/290 ppm vs 30-90 ppm). For oil-fired units the CO difference is even greater (150 ppm vs 1 ppm). In each of these examples, significant differences in EPA's proposed MACT standards exist and EPA offers no technical justification for its proposal that these limits in fact represent application of the "maximum achievable" control technologies.

If the PM and mercury limits remain roughly as proposed for existing sources, few sources will want to be regulated under section 129. Most sources will want to argue that they get a "meaningful" contribution to the overall combustion process from what they burn. This will increase the level of disagreement over whether a material is a waste and may result in fewer

sources burning waste materials. Some sources (with low CO levels) might find it in their interests to assert that they are incinerators rather than energy recovery units. Thus, the definitions of "solid waste" and "incinerator" may matter to a number of sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Robert H. Colby and G. Vinson Hellwig
Commenter Affiliation: National Association of Clean Air Agencies (NACAA)
Document Control Number: EPA-HQ-OAR-2006-0790-2022.1
Comment Excerpt Number: 34

Comment: Having listed this large group of boilers in order to meet the statutory requirements under sections 112 (c)(3) and 112(c)(6) that MACT standards cover 90 percent of certain HAP emissions, EPA asserts that it need not issue MACT standards for other HAPs emitted by these units because this category is not needed to meet the 90-percent requirement for those HAPs. We are concerned that EPA is likely to be challenged on this interpretation, and that an adverse decision on this issue could interfere with implementation of other parts of the rule if the MACT floor calculation must once again be revisited.

Response: See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Caroline Choi
Commenter Affiliation: Progress Energy
Document Control Number: EPA-HQ-OAR-2006-0790-2226.1
Comment Excerpt Number: 3

Comment: EPA Should Not Establish Mercury Emission Standards for Fuels Other Than Coal
In the preamble to the proposed rule, EPA states that it is taking comment on whether to establish MACT-based mercury emission standards for all boilers in the area source category. Progress Energy believes that setting emission limits for certain HAPs from boilers using low-emitting fuels is unnecessary and impractical. Establishing mercury emission limits for units burning any fuel other than coal, given the minute amounts of mercury those fuels contain, is unnecessary because those emissions are negligible and cannot be measured reliably. EPA even states in the preamble to the proposed rule that no emissions data were available in some cases and testing results were below the detection limit in others. Progress Energy urges EPA not to establish MACT-based mercury limits for oil and biomass-fired facilities in the final rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Alicia Oman

Commenter Affiliation: National Association of Manufacturers

Document Control Number: EPA-HQ-OAR-2006-0790-2234.1

Comment Excerpt Number: 59

Comment: EPA should allow a co-fired unit to opt out of the CISWI rule and into the Boiler MACT Rule if it stops burning solid waste.

EPA draws a bright line distinction in its proposed rules between units that burn solid waste, which will be regulated under the CISWI rule, and those that do not, which will be regulated under the Boiler MACT rule. See, e.g., Proposed Boiler MACT Rule Preamble at 29; Proposed CISWI Rule Preamble at 24. But the proposed rules provide little guidance for units capable of burning both solid waste and fuels that would theoretically cause them to be regulated under the Boiler MACT rule. Instead, EPA seeks “comment on whether” a unit that burns solid waste, and is thus subject to regulation under the CISWI rule, “could ... opt back into regulation under [the Boiler MACT rule] by taking a federally enforceable restriction precluding the future combustion of any solid waste material.” Proposed Boiler MACT Rule Preamble at 29-30. For the reasons discussed below, EPA should allow a co-fired unit to opt out of the CISWI rule and into the Boiler MACT rule if it stops burning solid waste.

Allowing a co-fired unit to opt out of the CISWI rule and into the Boiler MACT rule will provide a beneficial measure of flexibility to operators of such units who, for a variety of reasons, may in the future no longer want to burn solid waste. And, under *National Mining Association v. EPA*, 59 F.3d 1351, 1361-62 (D.C. Cir. 1995), any restrictions that a source takes to ensure that it not combust solid waste need only be practically and legally enforceable (for example, under state or local law), and not necessarily “federally” enforceable. As a policy matter, forcing operators to remain regulated under the CISWI standard should the unit no longer burn solid waste would needlessly penalize them with little to no benefit gained. Lastly, no law or regulation prevents EPA from allowing a unit to opt out of the CISWI rule and into the Boiler MACT rule.

Indeed, the only basis that might arguably stand in the way of opting out of CISWI and into Boiler MACT is EPA’s “once in always in” policy (“OIAI Policy”). Under the OIAI Policy, which was intended to be interim guidance until EPA could undertake rulemaking, if a facility is a major source for hazardous air pollutants (“HAPs”) on its first compliance date, it is required to comply permanently with the MACT standard in question. [Footnote: See “Potential to Emit for MACT Standards--Guidance on Timing Issues” Memorandum from John Seitz, Director, Office of Air Quality Planning and Standards to EPA Regional Air Division Directors, May 16, 1995.] EPA promulgated the Policy in 1995 for facilities seeking to comply with the then-new MACT standards on the belief that without such a policy, facilities would “backslide” from MACT control levels by (1) installing MACT required controls; (2) arguing that with those controls, the facility was then emitting below major source thresholds, and therefore no longer subject to the MACT standard; and (3) subsequently increasing emissions to major source thresholds or above.

But in practice the OIAI Policy has created an arbitrary distinction between major and area sources based solely on a facility's PTE at its first compliance date. The CAA does not compel this result; indeed, no such temporal limitation exists in the CAA. Further, the temporal distinction serves as a disincentive for sources to reduce HAP emissions beyond the levels required by an applicable MACT standard because the source gains no benefit from doing so (e.g., no reduced monitoring, recordkeeping, or reporting). And because there is no opportunity under the Policy for major sources to become area sources, major sources have no incentive to explore different control techniques or new and emerging technologies that would result in lower emissions. For these reasons, Manufacturers have consistently opposed the OIAI Policy, and EPA should abandon it, which the Agency proposed to do in 2007. [Footnote: See National Emission Standards for Hazardous Air Pollutants: General Provisions, Proposed Rule, 72 Fed. Reg. 69 (Jan. 3, 2007).]

Even if EPA does not abandon it, the OIAI Policy should not apply to the CISWI and Boiler MACT rules. By its terms, the Policy applies solely to circumstances where a facility seeks to limit its PTE to below major source thresholds in order to avoid having to comply with major source MACT standards. As such, the guidance was limited and EPA did not intend to apply it on a broader basis. Indeed, EPA confirmed this when it decided not to apply the Policy to sources regulated under the new mandatory Greenhouse Gas ("GHG") reporting rule. See, e.g., Mandatory Reporting of Greenhouse Gases, Final Rule, 74 Fed. Reg. 56260, 56300 (Oct. 30, 2009) (removing an OIAI provision from its proposed reporting rule to provide facilities with a greater incentive to reduce GHG emissions). EPA should do the same here for the CISWI/Boiler MACT rules where there is no concern over "backsliding." And the Policy makes little sense here where a unit, by virtue of its design and the type of fuel available, would have to comply with either the CISWI or the Boiler MACT rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Legal/Applicability: De-minimus Size Thresholds

Commenter Name: Cynthia Finley

Commenter Affiliation: National Association of Clean Water Agencies

Document Control Number: EPA-HQ-OAR-2006-0790-0838.1

Comment Excerpt Number: 1

Comment: The National Association of Clean Water Agencies (NACWA) represents the interests of nearly 300 publicly owned wastewater treatment agencies nationwide, serving the majority of the sewered population in the U.S. Some of these agencies have boilers at their treatment facilities that would be affected by the proposed NESHAP.

Most of the boilers at wastewater treatment facilities fall into the category of "small boilers", with a heat input capacity less than 10 million British thermal units per hour (MMBtu/h).

NACWA believes that EPA's proposed threshold of 10 MMBtu/h for dividing "small" and "large" boilers is appropriate.

Response: The rule establishes boiler tune ups as a management practice or work practice for boilers that are less than 10 MMBtu. Many manufacturers of boilers recommend tune ups as a good operating and maintenance procedure. This control requirement should not discourage environmentally sound used oil management by imposing severe compliance difficulties. While we have estimated that, on average, boiler tune ups will cost an approximately \$2200 annually, costs for individual units typically should be proportionate to the size of the boiler. Thus, very small boilers should not face severe cost impacts, especially in cases where the manufacturer and vendor recommends a tune up as part of boiler maintenance.

Units that burn solid waste and space heaters that do not boil water are exempt from this rule. Additionally, the rule exempts hot water heaters as defined in the rule. These exemptions are for units that are either excluded by statute or not within the original category as listed. Hot water heaters are similar to units in residences that are not affected by today's rule. Other noncommercial, noninstitutional, nonindustrial heat sources that could conceivably be used to warm water, such as "cook stoves" suggested by one commenter, are not within the source category. Most commenters that sought de minimis exemptions from the source category favored tune ups as a work practice or management practice as an alternative to a numerical limit for small boilers.

EPA has limited statutory authority to exempt units that are within the source category. Specifically, to the extent that the category is listed under CAA section 112(c)(3) to achieve the 90 percent threshold (and is needed based on our understanding of the inventory), we cannot exempt a portion of that category without calling into question whether we have fulfilled the statutory mandate. While many of the units that are within the category are small, in the aggregate they emit pollutants identified in the urban air toxics strategy in sufficient quantity to merit listing. Our approach has been to scale the requirements for boilers to place the least onerous requirements on the sources with the least emissions. This rule does not require title V permitting for area sources.

Commenter Name: Gordon Ericson

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-0995

Comment Excerpt Number: 1

Comment: I think that the rule should include a de minimis level for tiny systems such as Ash-Burners (a cyclonic drum-mounted burner) that burn oily rags for heat recovery. These systems are preferable for small businesses over landfill disposal but the units would certainly not be economical to operate under all of the new emissions monitoring. Small farm operations recycling biomass for heat recovery should also be exempt.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Harry Dresser, Jr.

Commenter Affiliation: Maine Energy Systems

Document Control Number: EPA-HQ-OAR-2006-0790-1060.1

Comment Excerpt Number: 6

Comment: Further refining the proposed area source standards by categorizing boilers as small (<1MMBTU), large (1MMBTU to 10MMBTU) and very large (>10MMBTU), and more precisely defining biomass fuel types as chips, cordwood, and pellets, would provide several advantages for all involved. It would allow the agencies to move each segment purposefully toward cleaner heat production while allowing those working in those segments to remain viable as they develop ever cleaner equipment.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 27

Comment: My name is James Simon. I'm the general manager of the American Sugar Cane League of the U.S.A., Inc., which is a non-profit organization of Louisiana sugar growers and processors. League members include the remaining 11 raw sugar cane mills still operating in Louisiana, and on behalf of the League, thank you for the opportunity to testify on the EPA's proposed regulation for area source biomass boilers.

Although the League will provide a more comprehensive document prior to the deadline for written comment, our goal today is to provide you with a general summary of our unique industry and to introduce our proposal for a conditional de minimis source exemption from the regulation.

The League requests that the EPA consider a conditional exemption for biomass-fueled area sources with de minimis HAP emission limits. Not only is each Louisiana mill well below the major source threshold for HAPs, but the sum of all permitted HAPs at Louisiana mills today total only three tons per year, far below the major source threshold.

Further, when only HAPs from boilers are considered, no single mill is permitted for -- is permitted for greater than half a ton per year.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Susan Parker Bodine

Commenter Affiliation: Used Oil Management Association, UOMA

Document Control Number: EPA-HQ-OAR-2006-0790-1972.1

Comment Excerpt Number: 2

Comment: There is no environmental or public health reason for EPA to try to regulate small used oil-fired boilers under section 112 of the Clean Air Act. Although they heat water, not air, these small boilers, like space heaters, meet the limitations set forth at 40 C.F.R. 279.23. That is, their heating capacity is less than 0.5 million Btu/hour. This capacity is far less than the limit of 10 million Btu/hour that EPA is proposing as a threshold to distinguish between small boilers and large boilers. As discussed in the attached comments, EPA has already determined that the space heaters and small boilers that meet the requirements of 40 C.F.R. 279.23 do not present a significant threat to human health and the environment. In addition, UOMA demonstrates in the attached comments that most of its customers are located outside of urban areas. Accordingly, there is no need to regulate used-oil fired boilers to meet the requirement under section 112(c)(3) to regulate area sources of 90 percent of the emissions of 30 urban hazardous air pollutants.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Susan Parker Bodine

Commenter Affiliation: Used Oil Management Association, UOMA

Document Control Number: EPA-HQ-OAR-2006-0790-1972.1

Comment Excerpt Number: 4

Comment: At a minimum, EPA must interpret section 112 of the Clean Air Act in a manner that does not conflict with section 3014 of the Resource Conservation and Recovery Act (RCRA), which states that: "The Administrator shall ensure that such regulations do not discourage the recovery or recycling of used oil, consistent with the protection of human health and the environment." 42 U.S.C. 6935(a). To avoid this conflict EPA should exempt small boilers from regulation under section 112 of the Clean Air Act by establishing a regulatory threshold that is higher than the .5 million Btu/hour capacity limit established under 40 C.F.R. 279.23.

Such an exemption also would be protective of the environment because it would allow users of used oil-fired boilers to continue to accept used oil from household do-it-yourself oil changers. As discussed in the attached comments, if persons are no longer able to burn used oil due to regulatory compliance costs under the Clean Air Act, then improper disposal of used oil by household do-it-yourself oil changers is likely to increase, threatening our Nation's waterways and undermining the goals of the Clean Water Act.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Steven Jarvis
Commenter Affiliation: Missouri Forest Products Association
Document Control Number: EPA-HQ-OAR-2006-0790-1477.1
Comment Excerpt Number: 11

Comment: Emission limits will apply to all new “small” boilers (except those that use propane or natural gas), the majority of which have not been regulated to date (<10 mmBtu/hr). As a result, many non-traditional sources of emissions such as churches, schools, hotels, apartments, restaurants, prisons and health care facilities will now be affected by EPA rulemaking. It is estimated that less than 1 percent of the population of small boilers are industrial boilers, 47 percent are commercial boilers, and 53 percent are institutional boilers. MFPA requests that new and existing small boilers, less than 3 MW capacity, should be exempted from the proposed emission limits, stack testing and monitoring requirements due to the high cost of compliance and limited amount of GHG emissions. These small biomass boilers represent a small fraction of all GHG emissions. The EPA should work with boiler manufacturers instead; to ensure that all types of emission targets are being met by new boilers.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimis size thresholds.

Commenter Name: Gordon Erickson
Commenter Affiliation: Alaska Ship and Drydock, Inc
Document Control Number: EPA-HQ-OAR-2006-0790-1479
Comment Excerpt Number: 1

Comment: Regarding the proposed Area Source Boiler MACT Rule, I would suggest a de minimis level for affected existing boilers of around 2 mmbtu or less be left exempt because of their extremely small size, minimal air quality return on investment, and economic hardship for affected owners.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimis size thresholds.

Commenter Name: Renee Lesjak Bashel
Commenter Affiliation: Small Business Environmental Assistance Programs, SBEAP
Document Control Number: EPA-HQ-OAR-2006-0790-2195.1
Comment Excerpt Number: 1

Comment: Recommendation: Provide an exemption level for very small units that will have limited impact on emissions. We suggest providing a lower limit of 1 million BTU per hour (MMBTU/hr) on applicability of the regulations.

In Table 2 of the proposed regulation, existing units burning coal, biomass, or oil with heat input capacity of less than 10 million Btu per hour (MMBTU/hr) are required to conduct a boiler tune-up biennially. The new regulations do not require emission limits on these existing smaller units because it is cost prohibitive.

This regulation does not have a lower floor. Even very small units that produce very little pollution will be required to have a tune up. In general, this could impact very small companies and produce minimal reduction in pollution.

What the SBO/SBEAPs have learned in implementation of another Area Source Rule (subpart HHHHHH, specifically with respect to autobody refinishing shops) is that there are many who operate at such low levels (5 gallons of paint per year or less in many one-man shops) that even a new spray gun can be cost prohibitive to the level of cash flow for the business. Every rule should have some lower level where any regulation is clearly unreasonable and offers negligible environmental benefit.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimis size thresholds.

Commenter Name: James P. Brooks

Commenter Affiliation: Maine Department of Environmental Protection

Document Control Number: EPA-HQ-OAR-2006-0790-1915.1

Comment Excerpt Number: 1

Comment: EPA failed to propose a de minimis threshold for applicability of the Area Source Boiler MACT. Maine has more than 1,000 licensed boilers and process heaters with design capacities of 1 million British thermal units per hour (MMBtu/hr) and greater that will be affected by this proposal. The Maine DEP estimates at least this many unlicensed units will also be affected, including boilers at many small businesses utilizing their units for space heating only. As the size of the boilers subject to the Area Source Boiler MACT becomes smaller, we will be faced with diminishing returns on the resources invested to achieve reduction of HAP emissions.

The Maine DEP believes EPA's failure to establish a de minimis threshold for applicability of the proposed standard is a significant oversight. As proposed, new units of any size, even those used only in the same capacity as a home heating unit, will need to meet emission standards for PM and CO. In order to comply with those standards many facilities will need to install electrostatic precipitators (ESPs) or fabric filters. EPA's proposal would require sources with ESPs to install continuous opacity monitoring systems (COMS). The Maine DEP believes this is an inappropriate requirement for very small units that would produce little to no environmental

benefit. The Maine DEP suggests that new units less than 1 MMBtu/hr be subject only to a manufacturer certification requirement and that owners and operators be required to perform a one-time energy audit.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Morris Mantey

Commenter Affiliation: Clean Burn, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1912.1

Comment Excerpt Number: 2

Comment: If used oil-fired heaters are not CISWI units, EPA arguably could seek to regulate them under the Area Source Boiler rule. Proposed section 63.11237 defines a boiler as an enclosed combustion device in which water is heated to recover thermal energy in the form of steam or hot water. Space heaters do not meet that definition because they heat air, not water. However, Clean Burn also manufactures small units that heat water with energy recovered from used oil. Arguably, those units would be subject to the proposed Area Source Boiler rule. However, there is no environmental or public health reason for EPA to try to regulate small used oil fired boilers under section 112 of the Clean Air Act. Although they heat water, not air, these small boilers, like space heaters, meet the limitations set forth at 40 C.F.R. 279.23. That is, their heating capacity is less than 0.5 million Btu/hour. This capacity is far less than the limit of 10 million Btu/hour that EPA is proposing as a threshold to distinguish between small boilers and large boilers. As discussed in the attached comments[See DCN: EPA-HQ-OAR-2006-0790-1912.2 through EPA-HQ-OAR-2006-0790-1912.6 for comments], EPA has already determined that the space heaters and small boilers that meet the requirements of 40 C.F.R. 279.23 do not present a significant threat to human health and the environment. In addition, Clean Burn demonstrates in the attached comments that most of its customers are located outside of urban areas.

Accordingly, there is no need to regulate used-oil fired boilers to meet the requirement under section 112(c)(3) to regulate area sources of 90 percent of the emissions of 30 urban hazardous air pollutants.

It is clear from the docket that EPA has not considered the impacts of this proposed rule on manufacturers and users of these very small units. The docket does not include any emissions or economic data relating to small used-oil fired boilers. For example, EPA has not considered the effect of a tune-up requirement on owners of existing used oil-fired boilers. In the docket for the CISWI rule, EPA provided information that the initial cost of a boiler tune-up is \$3,000 to \$7,000 per boiler, and subsequent annual tuning costs are approximately \$1,000 per boiler. (EPA-HQ-OAR-2003-0119-0041). In the Supporting Statement for the information collection provisions of the proposed Area Source Boiler rule, EPA asserts that boiler tune-ups cost \$2,228. (EPA-HQ-OAR-2006-0790-0031). Similarly, EPA has not considered the effect of the cost of emissions controls on owners of new used oil-fired boilers. In the docket for the CISWI rule, EPA provides information that the cost of installing a fabric filter ranges from approximately \$722,000 to \$31.3 million, and annual costs range from approximately \$139,000/yr to \$9.6

million/yr. (EPA-HQ-OAR-2003-0119-0054). In the same document, EPA assumed that the capital cost of adding a fabric filter to a used oil heater would be \$715,188 and the annual costs would be \$150,051. Id. Given these costs, EPA's statement in the preamble to the Area Source Boiler rule that fabric filters and electrostatic precipitators "are generally available and cost effective for new area source boilers" clearly does not apply to the small boilers that Clean Burn manufactures. 75 Fed. Reg. at 31909. In fact, in the context of the CISWI rule, EPA assumes that these costs impose such a significant burden that units would shut down. (EPA-HQ-OAR2003-0119-0054).

Before finalizing this regulation, EPA should conduct a cost-to-sales analysis of the economic impact of its proposed regulations on the small boilers that meet the limitations set forth in 40 C.F.R. 279.23. Just as EPA determined that testing and monitoring costs would be unaffordable for area source boilers (75 Fed. Reg. at 31906), Clean Burn believes that compliance costs would form a large percentage of the revenues of many Clean Burn customers, and in some cases may even exceed those revenues, demonstrating that EPA's proposal would impose a significant adverse economic impact on these small businesses.

To avoid these significant adverse impacts on Clean Burn customers and other users of small boilers, EPA should exempt small boilers from this rulemaking. Clean Burn is aware that, by failing to propose a small boiler exemption, EPA's proposed rule threatens to impose exorbitant compliance costs on not only the small businesses that are Clean Burn customers, but also on virtually all schools and churches. EPA is not compelled by law to regulate all boilers under section 112, and should exercise its discretion to avoid such absurd consequences.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimis size thresholds.

Commenter Name: Marie Robinson

Commenter Affiliation: National Telecommunications Safety Panel

Document Control Number: EPA-HQ-OAR-2006-0790-1960.1

Comment Excerpt Number: 3

Comment: In the proposed rule, EPA has chosen not to list natural gas-fired area source boilers since regulation of such boilers is not necessary to meet the 90 percent standard required under Clean Air Act ("CAA") § 112(c)(3).² The NTSP requests that the EPA use a similar rationale to not list area source boilers below certain de minimis thresholds.

Given the vast differentials in size and in the utilization of small boilers, the EPA should use its available CAA authority to create a de minimis exception based on size (e.g., 1 MMBtu/hr heat input), utilization (e.g., differentiating between boilers that are run nearly continuously and those that are used on a seasonal or sporadic basis), or other objective parameters. Rather than combine area sources of varying degrees of size and utilization within the "one size fits all" requirements related to area source below 10 MMBtu/hr heat input, the EPA should instead establish a de minimis heat input level below which area sources are not subject to regulation. Throughout the proposed rule, the EPA has recognized that different-sized boilers should be treated differently. Boilers over 100 MMBtu/hr are required continuously to monitor CO and maintain CO

emissions below the daily limits. Boilers over 10 MMBtu/Hr are required to meet varying emission standards based on fuel type. Boilers below 10 MMBTU/hr are subject only to requirements for boiler tune-ups. Therefore, EPA correctly realizes that different types of boilers have different emission characteristics that “influence the feasibility and effectiveness of emission control.”³ EPA should carry this logic to its natural conclusion: below a certain level, or for certain conditions such as seasonal comfort heating and hot water demand for personal use affecting the use of a boiler, controlling emissions from area sources is not productive and not required under the CAA.

In fact, the EPA has already proposed such an approach in its proposed National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.[75FR32006] In that proposal, EPA decided to exempt hot water heaters from regulation. Although the EPA recognized that, “hot water heaters, by their design and operation, could be considered boilers since hot water heaters meet the definition of a boiler as specified in the proposed rule . . . [they] are more appropriately described as residential-type boilers, not industrial, commercial, or institutional boilers because their output (i.e., hot water) is intended for personal use rather than for use in an industrial, commercial, or institutional process.” In addition, the EPA considered that, “their emissions are negligible compared to the emissions from the industrial operations that make such facilities major sources, and compared to boilers that are used for industrial, commercial, or institutional purposes.”⁶ Thus, the EPA has recognized that both the utilization of boilers and their relative size / emission profile can serve as justification for excluding such units from regulation. NTSP requests that similar consideration be given within this rule to creating a de minimis exception based on such factors.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimis size thresholds.

Commenter Name: James P. Brooks

Commenter Affiliation: Maine Department of Environmental Protection

Document Control Number: EPA-HQ-OAR-2006-0790-1915.1

Comment Excerpt Number: 3

Comment: The U.S. Department of Energy (DOE) regulates the efficiency of small “package” boilers in 10 CFR Part 431. DOE requires that oil-fired hot water boilers between 300,000 Btu/hr and 2.5 MMBtu/hr manufactured after March 2, 2012 meet a thermal efficiency standard of 82%; hot water boilers greater than 2.5 MMBtu/hr must meet a combustion efficiency standard of 84%. All oil-fired steam boilers of at least 300,000 Btu/hr manufactured after March 2, 2012 must meet a thermal efficiency standard of 81%. Such combustion efficiencies effectively limit emissions of CO and other pollutants. We recommend that EPA adopt similar efficiency standards for new boilers with capacities between 1 and 10 MMBtu/hr, and require a one-time energy audit. No other additional testing or controls should be required for these small units.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Marie Robinson

Commenter Affiliation: National Telecommunications Safety Panel

Document Control Number: EPA-HQ-OAR-2006-0790-1960.1

Comment Excerpt Number: 4

Comment: The EPA should include 10 MMBtu size cutoff for new boilers. The EPA is proposing to subject existing coal, biomass, and oil-fueled boilers with MMBtu heat input capacity at or above 10 million Btu/Hr to specific emission standards (e.g., 0.03 lb per MMBtu of heat input for particulate matter). While the EPA is proposing that existing coal, biomass and oil-fueled boilers below 10 MMBtu/Hr be subject to work practice standards under CAA section 112 (h), the EPA is proposing that all new boilers, no matter what size, fuel type or utilization be subject to the same emission standards as existing boilers above 10 MMBtu/Hr. This disparate treatment is at odds with the EPA's rationale for the 10 MMBtu/hr size cutoff for emission standards – as well as at variance with the real world utilization of small boilers.

In assessing the 10 MMBtu/hr size cutoff for emission standards for existing boilers, the EPA analyzed total compliance costs of the standards relative to average firm revenues of the facilities and determined that costs for testing and monitoring would have a significant adverse economic impact on the facilities. The EPA also determined that technological options for controlling emissions from area source boilers (e.g., multiclones, fabric filters) were not available or achievable for certain boilers and that standard methods for measuring emissions of mercury “are not applicable for sampling small diameter stacks.”⁷ The EPA, however, indicated that new facilities have “added flexibility of including compliance costs into their design and planning as well as “the option of fuel selection in minimizing their compliance costs.”

In such assessments, the EPA has made an overly broad conclusion both as to the availability and feasibility of control technology and the accessibility of fuels. It is simply not true that any company or facility has a free choice as to how to fuel its boilers in all areas. The availability of natural gas is constrained by location as well as the feasibility of using other fuels. That control technology may be supportable for relatively large area sources moreover does not establish that the same technology can be applied to relatively small area sources. Data compiled for this rulemaking and the MACT floor methodology simply cannot support a broad conclusion that all new facilities are somehow able to comply with standards that are not feasible or available for all existing facilities.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Jeffery S. Hannapel

Commenter Affiliation: National Association for Surface Finishing

Document Control Number: EPA-HQ-OAR-2006-0790-1840.1

Comment Excerpt Number: 7

Comment: The emissions data set includes obvious errors that, if fixed, would have a significant impact on EPA's determination of the MACT floor and MACT standards. For example, several of the boilers used to determine the MACT floors have rated capacities of less than 10 mmBtu/hr. These units would not, however, be subject to numeric emissions limitations under the Boiler GACT. Because EPA must determine existing source MACT standards based on emissions data from sources in the category or subcategory being regulated, emissions data from the small boilers cannot be used in setting emissions limitations for the regulated sources in the Boiler GACT.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Arthur N. Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management, NESCAUM

Document Control Number: EPA-HQ-OAR-2006-0790-2137.1

Comment Excerpt Number: 13

Comment: NESCAUM recommends segregating units less than 1 mmBtu/hr, as we have found that these units are significantly different than the larger units in design. Additionally, the compliance burden for these smaller sized units, as proposed, will be high. NESCAUM suggests that these units be subject to unit certification by the manufacturer, as is currently done for smaller residential units. NESCAUM recommends that EPA institute a requirement for a model certification for solid fuel units less than 1 mmBtu/hr and annual tune-ups thereafter.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Matthew Todd and David Friedman

Commenter Affiliation: American Petroleum Institute (API) and National Petrochemical and Refiners Association (NPRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2025.1

Comment Excerpt Number: 30

Comment: CO emission limits are proposed to apply to boilers above 10 MMBTU/hr design heat duty and work practice requirements are proposed to apply to boilers below 10 MMBTU/hr. Since there is no minimum size, these work practice requirements would apply to even the smallest liquid-fired boiler or hot water heater, such as those designed for homes, laboratories and small offices. It could even be construed to apply to cook stoves that use oil (e.g., camping stoves) when they are boiling water for coffee or tea. The database supporting this rulemaking

did not consider such small boilers and hot water heaters, nor did the cost and burden estimates for the proposed work practice requirements include them. Applying the proposed work practice requirements and the recordkeeping and reporting requirements of this rule and the general provisions to such small boilers and hot water heaters will provide no measurable benefit and they should be excluded. We recommend a 5 MMBTU/hr minimum design heat duty for making any requirements of this proposal applicable. Since such units may be located on a site with larger boilers and there are notice and recordkeeping requirements for any affected facility, we suggest the best way to manage this concern is to revise the boiler definition to exclude boilers below 5 MMBTU/hr, thereby excluding such boilers from being an affected facility or part of an affected facility under this proposal. Five MMBTU/hr is the minimum heat duty in the South Coast and New Jersey boiler tune-up rules, which are two of the key rules that establish the tune-up floor.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Matthew Todd and David Friedman

Commenter Affiliation: American Petroleum Institute (API) and National Petrochemical and Refiners Association (NPRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2025.1

Comment Excerpt Number: 43

Comment: This work practice is proposed to be required for all boilers having a design heat capacity <10 MMBTU/hr. The proposal contains no lower limit on the applicability of this work practice. Thus, even the smallest liquid-fired boiler or hot water heater is subject to this requirement. There are likely thousands and thousands of liquid-fired very small boilers and hot water heaters used for building heat in commercial situations throughout the country (e.g., individual gas stations, stores, offices, banks, restaurants, etc.). The State rules that require tune-up work practice requirements for boilers all have a lower limit on applicability – typically 5 MMBTU/hr, though some apply down to 1 MMBTU/hr. EPA has provided no basis for applying tune-up requirements to boilers smaller than that, nor, do we think there is any emission reduction basis. Thus, we recommend EPA establish a lower limit of applicability of 5 MMBTU/hr for the tune-up requirement, if it is maintained.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Robert R. Scott

Commenter Affiliation: New Hampshire Department of Environmental Services

Document Control Number: EPA-HQ-OAR-2006-0790-1952.1

Comment Excerpt Number: 15

Comment: NHDES has concluded that the proposed area source NESHAP may place a larger administrative burden on regulatory agencies than EPA has intended. Virtually all states have permitting thresholds that establish minimum size cutoffs for permitting applicability. For example, in New Hampshire an air permit is required for a boiler greater than 2 million Btu per hour (gross heat input rating) that combusts biomass, coal, used oil, or #6 fuel oil. For fuels such as natural gas and #2 fuel oil, the permit threshold is 10 million Btu per hour gross heat input. Based on this proposal, it appears that NHDES would be expected to permit a much larger universe of boilers. Not only does this increase the demands on permitting resources, but it also increases the inspection burden on staff assigned to verify compliance with the proposed standards. NHDES recommends that EPA establish a small unit cutoff of 1 million Btu per hour and establish a work practice standard that includes tune-up and a combustion efficiency assessment in place of an emission limitation for existing boilers less than 1 million Btu per hour. In addition, manufacturers of new boilers less than 1 million Btu per hour should be required to certify that their devices meet efficiency standards along with an annual tune-up requirement. EPA should also require that both new and existing small boilers be required to maintain and operate the boiler consistent with the annual tune-up. In this way, EPA would still require tune-ups and increased efficiency of the boilers while removing the permitting burden of thousands of small, currently un-permitted devices throughout the United States.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: John Huber

Commenter Affiliation: National Oilheat Research Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1831.1

Comment Excerpt Number: 2

Comment: Furthermore, we believe that the small boilers of less than 3 MMBTU should not be regulated by the Area Source Rule. However, if EPA believes they must regulate liquid-fueled boilers < 3 MMBTU, they should be subject to a work practice consisting of a biennial boiler tune-up requiring no EPA reporting, but that recording of the tune-up be retained by the service provider for inspection by EPA.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: John Huber

Commenter Affiliation: National Oilheat Research Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1831.1

Comment Excerpt Number: 9

Comment: An exemption should be adopted for liquid-fueled boilers equal to or less than 3 MMBTU in capacity. NORA believes that the operation of these boilers, the lack of support and the fact that EPA did not consider what type of pollution control equipment could be placed on these boilers, requires them to be exempt from this rule at this time.

If such an exemption is not possible, EPA has ample authority to prescribe a reasonable work practice standard instead of a numeric emissions limit. Section 112(h)(2)(B) authorizes EPA to establish work practice standards when “the application of measurement methodology to a particular class of sources is not practicable due to technological and economic limitations.” Such is the case for the proposed dioxin/furan standard for biomass boilers – the proximity of the standard to the detection limit makes testing for compliance not technologically practicable, while the inability to accurately measure at the level of the proposed standard is economically impracticable because spending more money on the prescribed method will not resolve the inherent problem of setting the standard at the method detection limit. A work practice standard requiring good combustion practices is justified in this situation and would assure that dioxin/furan emissions are minimized.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Robert R. Scott

Commenter Affiliation: New Hampshire Department of Environmental Services

Document Control Number: EPA-HQ-OAR-2006-0790-1952.1

Comment Excerpt Number: 16

Comment: NHDES recommends that EPA establish a small unit cutoff of 1 million Btu per hour and establish a work practice standard that includes tune-up and a combustion efficiency assessment in place of an emission limitation for existing boilers less than 1 million Btu per hour. In addition, manufacturers of new boilers less than 1 million Btu per hour should be required to certify that their devices meet efficiency standards along with an annual tune-up requirement. EPA should also require that both new and existing small boilers be required to maintain and operate the boiler consistent with the annual tune-up. In this way, EPA would still require tune-ups and increased efficiency of the boilers while removing the permitting burden of thousands of small, currently un-permitted devices throughout the United States.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: John Huber

Commenter Affiliation: National Oilheat Research Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-1831.1

Comment Excerpt Number: 19

Comment: Further, given that residential boilers will generally not be using pollution control equipment, but will rather be tuned up to reduce particulate matter. Since the amount of metals that are emitted will be a function of the metals bound in the fuel, periodic testing of the burners for particulate will provide no benefit. The small boilers that we are describing and their particulate emissions will be determined by the unburned hydrocarbons, or sulfur in the fuel, neither of which will affect the amount of particulates which EPA is attempting to control. Thus, the testing and any modifications will not accomplish Congress's desired goal of regulating the 90 percent of emissions.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Michael Wagner

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2271

Comment Excerpt Number: 1

Comment: Several major corporations have mills in northern Wisconsin, but there are also many small facilities that include sawmills, veneer plants, and lumber mills. Most of these facilities are area sources that have one or more wood fired boilers to supply heat and/ or process steam for plant operations. Several local schools also have small wood fired boilers to heat the schools during the winter months. These facilities use wood waste generated on site or purchased from nearby sources as boiler fuel. Most of these boilers have heat input ratings less than 30.0 million BTU per hour due to the way that the New Source Performance Standard (NSPS) for small industrial, commercial, and institutional steam generating units (Subpart Dc) is written. This NSPS requires only some recordkeeping for wood boilers between 10.0 and 30.0 million BTU per hour so boilers in this size range have been the popular choice for many facilities. The title of Subpart Dc is Small Industrial Commercial and Institutional Steam Generating Units and this NSPS applies to steam generating units with a maximum design heat input capacity of 100 million BTU per hour or less, but greater than 10 million BTU per hour. In this NSPS, U.S. EPA effectively defined small steam generating units to be 100 million BTU per hour or less and created an additional grouping of wood boilers that are less than 30 million BTU per hour. The proposed area source boiler NESHAP uses a much smaller maximum design heat input value as the top end of the small boiler subcategory (10 million BTU per hour) for existing boilers. My perspective is that U.S. EPA is being inconsistent with regard to what is considered a "small" boiler by setting 10 million BTU per hour as the threshold between small and large boilers in the proposed NESHAP for area source boilers.

Raise the applicability threshold for emission limits on existing oil and biomass boilers to a heat input capacity value greater than 10 million BTU per hour. A suggested value would be 30 million BTU per hour since that value is used in the NSPS in Subpart Dc as a threshold for some requirements affecting wood fired boilers.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Jonathan Wood

Commenter Affiliation: Vermont Agency of Natural Resources

Document Control Number: EPA-HQ-OAR-2006-0790-2248

Comment Excerpt Number: 1

Comment: As currently proposed, the regulation has no lower boiler size threshold for applicability. To help ensure that limited federal and state resources, and regulatory burden, are effectively focused on those units with the greatest emission potential, small boilers should be not be subject to this rule. The Agency feels that small boilers below a certain threshold should be excluded from the rule due to their minimal emissions potential and the resources needed to effectively regulate these numerous small sources. The Agency would suggest that oil and biomass fired units below 1 MMBtu/hr heat input be excluded from regulation. Additionally, EPA should consider treating boilers firing ultra low sulfur diesel fuel the same as natural gas boilers and be exempted from the regulation. This would provide an opportunity for smaller units where natural gas is not readily available, such as in most of Vermont, to readily comply with little regulatory burden or oversight.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Craig S. Smith

Commenter Affiliation: Biewer Wisconsin Sawmill

Document Control Number: EPA-HQ-OAR-2006-0790-2232

Comment Excerpt Number: 1

Comment: The heat rating for our boiler is 55.6 MMBTU/hour. In the proposed area source boiler NESHAP it uses a much smaller maximum design heat input value as the top end of the small boiler subcategory, which is 10MMBTU/hour for existing boilers. It appears that the EPA is being inconsistent in what it considers a small boiler by setting a 10MMBTU/hour rating as the limit in determining what is a small/large boiler.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: John M. Irving

Commenter Affiliation: Burlington Electric Department

Document Control Number: EPA-HQ-OAR-2006-0790-2171.1

Comment Excerpt Number: 1

Comment: It seems the EPA has assumed all major source (criteria pollutants) facilities are also major for hazardous air pollutants. McNeil Station has provided test data satisfactory to the State of Vermont, Air Pollution Control Division (see attached e-mail) to demonstrate that McNeil Station is not a major source of HAPs (i.e., <10 TPY single or <25 TPY aggregate). We are concerned that the proposed regulations (Area, Major, or Utility MACT) subject us to burdensome and costly requirements to achieve negligible results; given the low levels of HAPs emitted from this facility. We propose that facilities or sub-categories be offered de minimis limits that, if met, would exempt units from all or parts of the regulation.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimis size thresholds.

Commenter Name: Eric Trauner

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2286

Comment Excerpt Number: 1

Comment: It is indeed a sound policy to limit compliance demonstration for natural gas boilers to implementation of work practices/ maintenance. There should be a distinction made on expectations for decidedly small boilers (such as 20 MMBTU per hour and less) vs larger, and thus avoid a one-size-fits-all philosophy. For instance, small natural gas boilers (as defined in the previous sentence) should face lesser tune-up standards than the current proposal.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimis size thresholds.

Commenter Name: Richard Rosvold

Commenter Affiliation: Xcel Energy Services, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-2259.1

Comment Excerpt Number: 1

Comment: Xcel Energy supports the inclusion of a de minimis category based on hours of operation. Many boilers in this category, especially liquid-fueled boilers, are only operated for a limited number of hours each year. For such limited-use boilers, conducting annual stack tests could represent a significant portion of the unit's total operating time. It makes no sense to require extensive testing and monitoring for units that are rarely used. We suggest that units that operate for less than 500 hours per year be exempt from the monitoring and testing requirements.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: James L. Kavanaugh

Commenter Affiliation: Missouri Department of Natural Resources

Document Control Number: EPA-HQ-OAR-2006-0790-2251

Comment Excerpt Number: 1

Comment: The proposed rule requires existing units burning coal, biomass, or oil with heat input capacity of less than 10 million Btu per hour to conduct a biennial boiler tune-up. The new rule does not require emission limits on these existing smaller units because it is cost prohibitive.

This regulation does not have a lower floor since it requires very small units that produce negligible emissions to have a tune-up. This requirement could negatively impact very small companies and result in minimal benefits for pollution reduction. We recommend setting a lower limit of one MMBtu on the regulations.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Marilyn Crockett

Commenter Affiliation: Alaska Oil and Gas Association

Document Control Number: EPA-HQ-OAR-2006-0790-2212.1

Comment Excerpt Number: 1

Comment: AOGA agrees with EPA's primary basis for establishing a de minimis size threshold of 10 MMBtu/hr for the applicability of numerical standards to existing boilers. On page 31906 of the preamble, EPA indicates that as allowed under the Act, work practice standards are more appropriate than emission standards for such units because standard reference emissions test methods are infeasible for small diameter stacks (less than 12 inches).

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Robert G. Hedden

Commenter Affiliation: Oilheat Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-2249

Comment Excerpt Number: 2

Comment: We believe that the small boilers of less than 3 MMBtu/h should not be regulated by this rule, and if so, they should be subject to a work practice consisting of a biennial boiler tune-

up requiring no EPA reporting, but that recording of the tune-up be retained by the service provider for inspection by EPA.

Large industrial and commercial boiler have very little in common with the less than 10 MMBtu/h boilers OMA members manufacture. Requiring them to comply with the same testing is similar to comparing a Boeing 747 to a Smart car. It is true they are both transportation devices, but their environmental impact, and the testing procedures required to evaluate their performance are very different.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimis size thresholds.

Commenter Name: Martha E. Rudolph

Commenter Affiliation: Colorado Department of Public Health and Environment

Document Control Number: EPA-HQ-OAR-2006-0790-1979.1

Comment Excerpt Number: 2

Comment: There is no de minimis level for boilers regulated under the Area Source Boiler Rule, meaning this rule may affect a significant number of very small boilers typically not regulated in Colorado. The State suggests EPA consider regulating small boilers (less than 10 million British Thermal Units), including boilers burning clean wood pellets, by setting an emissions standard that manufacturers must meet for all new units, and establishing criteria to streamline compliance demonstrations for certain existing units. Compliance demonstrations for existing units might be made by relying on performance testing results from units tested under representative conditions coupled with a requirement to tune the unit.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimis size thresholds.

Commenter Name: Keith M. Krom

Commenter Affiliation: AT&T, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-2243

Comment Excerpt Number: 2

Comment: In the proposed rule, EPA has chosen not to list natural gas-fired area source boilers since regulation of such boilers is not necessary to meet the 90 percent standard required under Clean Air Act ("CAA") 112(c)(3). AT&T requests that EPA use a similar rationale to not list area source boilers below certain de minimis thresholds.

Given the vast differentials in size and in the utilization of small boilers, EPA should use its available CAA authority to create a de minimis exception based on size (e.g., 1 million British thermal units per hour ("MMBtu/hr") heat input), utilization (e.g., differentiating between boilers that are run nearly continuously and those that are used seasonally or on a sporadic basis), or other objective parameters. Rather than combine area sources of varying degrees of size and

utilization within the "one size fits all" requirements related to area source below 10 MMBtu/hr heat input, EPA should instead establish a de minimis heat input level (or other parameter) below which area sources are not subject to regulation. Throughout the proposed rule, EPA has recognized that different-sized boilers should be treated differently. Boilers over 100 MMBtu/hr are required continuously to monitor CO and maintain CO emissions below the daily limits. Boilers over 10 MMBtu/hr are required to meet varying emission standards based on fuel type. Boilers below 10 MMBTU/hr are subject only to requirements for boiler tune-ups. Therefore, EPA correctly realizes that different types of boilers have different emission characteristics that "influence the feasibility and effectiveness of emission control." EPA should carry this logic to its natural conclusion: below a certain level, or for certain conditions affecting the use of a boiler such as use for seasonal comfort heating or hot water for personal use, controlling emissions from area sources is not productive and not required under the CAA.

In fact, EPA has already proposed such an approach in its proposed National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters. In that proposal, EPA decided to exempt hot water heaters from regulation. Although EPA recognized that, "hot water heaters, by their design and operation, could be considered boilers since hot water heaters meet the definition of a boiler as specified in the proposed rule . . . [they] are more appropriately described as residential-type boilers, not industrial, commercial, or institutional boilers because their output (i.e., hot water) is intended for personal use rather than for use in an industrial, commercial, or institutional process." In addition, EPA considered that, "their emissions are negligible compared to the

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emissions from the industrial operations that make such facilities major sources, and compared to boilers that are used for industrial, commercial, or institutional purposes." Thus, EPA has recognized that both the utilization of boilers and their relative size/emission profile can serve as justification for excluding such units from regulation. AT&T requests that similar consideration be given within this rule to creating a de minimis exception based on such factors.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimis size thresholds.

Commenter Name: Dan H. Williams

Commenter Affiliation: Sealed Air Corp

Document Control Number: EPA-HQ-OAR-2006-0790-2228.1

Comment Excerpt Number: 3

Comment: Unlike other MACT standards, this proposed rule does not contain any exclusions for smaller boilers. As drafted, this standard would require emission limitations, work place standards, and prescribed maintenance efforts on equipment that are insignificant in many states and often unpermitted. Although permitting thresholds vary by state and by fuel burning types, each state that Sealed Air Corporation operates in has some permitting threshold. We feel that establishing a federal air standard that incorporates all boilers regardless of size will create

excessive permitting, recordkeeping, and reporting burdens at facilities that may have been previously exempt. At a minimum, Sealed Air Corporation recommends a minimum applicability threshold be established based upon boiler heat input capacity (BTU/hr) or similar parameter.

As proposed, tune-ups would be required for even the smallest boiler or process heater at a major source, such as those designed for homes, laboratories, cafeterias and offices. The proposal would require tune-ups and permitting burdens for such small units as laboratory and cafeteria steam generators, steam cleaners (e.g., carpet cleaners), gas-fired oil fryers for food fryers and similar insignificant sources. The database supporting this rulemaking did not consider such small boilers and process heaters and the cost and burden estimates did not consider them. Applying the tune-up requirements and the recordkeeping and reporting requirements to them will provide no benefit and they should be excluded.

EPA provides justification (not economically feasible) for units of ≥ 10 MMBTU/hr to be subject to biennial tune-up requirements rather than annual. We believe that the EPA analysis actually underestimates the cost and overestimates the potential emission reductions and that small units ≥ 10 MMBTU/hr should be exempt from the regulation.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimis size thresholds.

Commenter Name: Daniel Moss

Commenter Affiliation: Society of Chemical Manufacturers and Affiliates

Document Control Number: EPA-HQ-OAR-2006-0790-2018.1

Comment Excerpt Number: 3

Comment: SOCMA strongly supports EPA's decision to propose work practice standards for area source boilers having a heat input capacity of less than 10 MMBtu/h. As the agency noted, Clean Air Act Section 112(h)(1) states that "the Administrator may prescribe a work practice standard or other requirements, consistent with the provisions of CAA sections 112(d) or (f) in those cases where, in the judgment of the Administrator, it is not feasible to enforce and emission standard." The agency elaborates, describing the Clean Air Act's definition of "not feasible" as meaning when "the application of measurement technology to a particular class of sources is not practicable due to technological and economic limitations." [Footnote: 75 Fed. Reg. at 31906.]

As EPA acknowledges, "The vast majority of area source boilers are estimated to be located at commercial and institutional facilities and generally owned or operated by small entities. Because of this," the agency correctly "anticipates that the proposed rulemaking would have a significant economic impact on small entities," precisely the type of businesses who are hit hardest by such an impact.

As EPA correctly explains, those existing limitations for smaller existing source boilers are real. Since the standard reference methods for measuring emissions of mercury, CO (as a surrogate

for POM and other organics) and PM (as a surrogate for urban non-mercury metals) are “not applicable for sampling” the less-than 12”-diameter stacks that boilers with a heat input capacity of less than 10 MMBTu/h generally have, and since many area source boilers would need expensive modifications to install sampling ports and a platform, the “not feasible” standard certainly applies.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Pamela F. Faggert

Commenter Affiliation: Dominion

Document Control Number: EPA-HQ-OAR-2006-0790-2257.1

Comment Excerpt Number: 3

Comment: EPA should establish a size cut-off (at 1 to 3 mmBtu/hr, for example) for work practice requirements. This would reduce the cost burden for very small units while not greatly impacting estimated emission reductions.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Michael A. Zapkin

Commenter Affiliation: Eastman Kodak Company

Document Control Number: EPA-HQ-OAR-2006-0790-2170.1

Comment Excerpt Number: 4

Comment: Based on significant cost for insignificant environmental benefit Kodak believes that a work practice standard in lieu of a numerical standard for CO is appropriate as Generally Achievable Control Technology (GACT) for existing oil-fired boilers. At a minimum the cutoff for applicability of the numerical standard should be increased from 10 MMBTU/hr to 100 MMBTU/hr.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Scott Davis

Commenter Affiliation: Arizona Public Service Company

Document Control Number: EPA-HQ-OAR-2006-0790-2233.1

Comment Excerpt Number: 4

Comment: APS also operates several oil/natural gas fired power plants that are area sources. Similar to Palo Verde, all of the auxiliary boilers located at these facilities run sparingly and in some cases not at all. Under the proposed rulemaking these boilers would also be required to meet a CO limit of 2 ppmvd on a daily bases, install CO CEMS, and perform an energy assessment. For boilers that do not run or run infrequently, APS believes that requiring stringent GACT standards is impractical, and cost prohibitive.

Therefore, APS recommends EPA set a de minimus level based on hours of operation where boilers operating less than the prescribed level are exempt from emission standards and monitoring requirements. APS suggests a de minimus level of 100 hours per year. This is consistent with other NESHAP rules that address similar low use sources. Specifically, the Compression Ignition Reciprocating Internal Combustion Engine Rule establishes that emergency generators are not subject to emission standards and allocates 100 hours per year of non-emergency operations (maintenance checks and readiness testing].

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Christopher S. Colman

Commenter Affiliation: Hess Corp.

Document Control Number: EPA-HQ-OAR-2006-0790-2168.1

Comment Excerpt Number: 4

Comment: Exemptions should apply to 3MMBTU and smaller boilers.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Fred Gordon

Commenter Affiliation: Herman Miller, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-2046.1

Comment Excerpt Number: 6

Comment: The EPA should identify a lower threshold below which the rule does not apply.

With new rules it is a common occurrence that once adopted new sources are found that meet the definition, but were not expected or not considered. They typically escape notice during the rulemaking process because of their relatively small size. However, they technically become regulated and in this case would become subject to Title V permitting. The amount of resources required to implement these requirements for the smaller sources would certainly be substantial, and the associated benefit would be negligible.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Michael Wagner

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2271

Comment Excerpt Number: 10

Comment: Establish an applicability threshold for emission limits on new coal, oil, and biomass boilers. Suggested values would be 10 million BTU per hour for coal fired boilers and 30 million BTU per hour for oil and biomass boilers.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Robert G. Hedden

Commenter Affiliation: Oilheat Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-2249

Comment Excerpt Number: 10

Comment: OMA agrees with NORA's conclusion that small boilers of less than 3 MMBtu/h should be established as a category and not be subject to any regulation as you have done for natural gas and propane.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Thompas P. Balf

Commenter Affiliation: Campus Cortium for Environmental Excellence

Document Control Number: EPA-HQ-OAR-2006-0790-1657.1

Comment Excerpt Number: 12

Comment: While we generally support the requirement to conduct a biennial tune-up for oil-fired boilers < 10MMBtu/Hr, the current proposal does not specify a de minimis threshold as is often identified in state air pollution regulations. A "typical" C2E2 campus averages greater than 250 buildings and 2MM gross square feet of building space. Our largest members may have more than 750 buildings and 15MM gross square feet. Each campus is likely to have hundreds of very small, residential-type boilers. Tracking these small units, conducting tune-ups and annually notifying the agency is resource intensive with little benefit to human health and the environment

Exempt ICI boilers less than 3MM BTU/hr, as currently exempted from permitting and notification requirements in such states as Massachusetts and Nevada.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Martin T. Booher

Commenter Affiliation: Ethan Allen Interiors, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1974.1

Comment Excerpt Number: 15

Comment: Ethan Allen appreciates EPA's approach to addressing CO emissions from industrial boilers and believes that work practice standards represent a reasonable method to address emissions of CO from these sources. However, EPA should consider raising the threshold to include boilers of up to 60 MMBtu/hr. Ethan Allen understands that EPA's decision to establish the 10MMBtu/hr heat input capacity threshold for exempting sources from emissions standards and instead applying work practice standards was based in large part on a cost-to-sales analysis. RTI, Inc., Cost-to-Sales Analysis of Testing and Monitoring Costs (2007). According to the EPA, the cost-to-sales analysis demonstrates that testing and monitoring costs alone would have a substantial adverse effect on a large number of boilers with a heat input capacity of 10 MMBtu or lower. As a result, the EPA has determined under CAA § 112(h) that enforcement of standards for these boilers is not feasible.

The EPA's cost-to-sales analysis, however, was based on outdated data that no longer reflects the status of the market for regulated industries, particularly with respect to the furniture manufacturing industry. The analysis relies on industry figures from the 2002 Economic Census. Id. at 2, appx. More recent economic figures are available, however even these may no longer be valid due to the current economic crisis and the increased competition that domestic industries, like furniture makers, are facing from companies abroad.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Charles B. Jones, III

Commenter Affiliation: Georgia Traditional Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1923.1

Comment Excerpt Number: 20

Comment: GTMA recommends that the 10 MMBtu/hr threshold for exemption from this rule should be raised to at least 501VIMBtu/hr, consistent with certain state boiler thresholds (New Jersey is one example) defining "small" boilers.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Don Kaiser

Commenter Affiliation: Pellet Fuels Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2231

Comment Excerpt Number: 5

Comment: Because the combustion design of area source biomass boilers, including especially biomass boilers with design capacity less than 10 mmBtu/hr, varies widely, this immense gap in EPA's knowledge means that EPA has no way to manage the risk that units of a particular combustion design would drive EPA's MACT "floor" determination to such stringent levels as to foreclose the use of other designs, however economically valuable those other designs might be. Another way to manage the risk is to account broadly for variability. But again there is too little information, because EPA has not taken stock of the varieties of combustion design, particularly in the case of biomass boilers below 10 mmBtu/hr. While EPA can guess at an appropriate CO standard for such boilers, it cannot determine that there are technologically feasible ways in actual usage by which such boilers generally can achieve the standard, as section 112(d) requires.

EPA's development of the MACT "floor" for CO for new area source biomass boilers is a prime example. While EPA does have emissions data showing that several area source biomass boilers below 10 mmBtu/hr had, under the tested operating conditions, CO emission levels which were less than 100 ppm,¹¹ EPA has no factual basis for thinking that other such small biomass boilers generally have some way of achieving those levels given their fundamental design. In a word, EPA has not — and indeed cannot — demonstrate that the CO emissions data it has are representative for the broad range of designs of such small biomass boilers, as required by the rationality and achievability principles underpinning section 112(d). As illustrated below, the design of such boilers, including fuel type, varies greatly. Just the fuels are myriad: stick wood, wood chips, sawdust, pellets, corn, stover, grasses, forest residues, yard waste, paper mill sludge, etc. Also, designs for small biomass boilers vary greatly with respect to the fuel feeding system, heating demands, temperature control, combustion technology, heat transfer systems, parameter monitoring, and automation.

The same basic point applies to EPA's proposal of 0.03 lb/mmBtu as the GACT standard for PM emissions from all new area source biomass boilers, including those with design capacity less than 10 mmBtu/hr. EPA expressly acknowledges in its TSD that: "All of the boilers [for which EPA had emissions data] were greater than 10 million Btu per hour in size."¹² In light of EPA's further express knowledge (described above) that it has no inventory of the combustion designs of area source biomass boilers generally, much less biomass boilers under 10 mmBtu/hr, EPA lacks a rational basis for extending the NSPS precedent of 0.03 to such small biomass boilers. Indeed, the relevant NSPS (Subpart Dc) itself exempts all boilers below 10 mmBtu/hr, even after undergoing a formal update "review" in the 2005-06 timeframe. See, e.g., 71 Fed. Reg. 9866 (Feb. 27, 2006). Thus, since EPA bases its selection of the 0.03 limit largely on the

existence of Subpart Dc, rationality calls for EPA to likewise exempt new biomass boilers below 10 mmBtu/hr from the GACT standard.

In any event, EPA cannot possibly have data showing that it is reasonably cost-effective, a key criterion in a GACT analysis, to control a biomass boiler under 10 mmBtu/hr to the level of 0.03 lb/mmBtu. As EPA's record shows already (see above), the cost of the necessary add-on control equipment would be comparable to, or exceed, that of the boiler and the installation itself. It would be a violation of common sense to apply a FF system to a biomass boiler under 10 mmBtu/hr.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: Wayne York

Commenter Affiliation: Hancock Lumber Company, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-2002

Comment Excerpt Number: 6

Comment: A clear de minimus level should be developed, in order to clarify rule applicability. For example, household-size boilers and water heaters at industrial, commercial, and institutional facilities would be subject to the rule as proposed.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Legal/Applicability: Brick MACT Court Decision

Commenter Name: Rich Raiders

Commenter Affiliation: Arkema Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1958.1

Comment Excerpt Number: 2

Comment: In *Sierra Club v. EPA*, 479 F.3d 875 (D.C. Cir 2007) ("Brick MACT"), the D.C. Circuit instructed EPA to regulate all HAP emitted from MACT source categories in each MACT standard. Because § 129 standards follow the MACT standard setting process, Brick MACT also applies to CISWI. However, EPA seems to have taken the lessons of Brick MACT further than the Court intended.

In all three proposals, EPA evaluates each source category and subcategory to determine the average of the best performing 12% of sources in accordance with CAA § 112(d)(3)(A). EPA then set the existing source standard for each pollutant at the calculated floor level for that single

pollutant. However, in his Brick MACT concurrence, Judge Williams wrote that the “achievable” language at § 112(d)(3) and the “achieved” language at § 112(d)(3) must not conflict in an individual MACT standard. To show that it’s calculated “achievable” levels can actually be achieved in practice, EPA is required to show that the average of the best 12% can meet, without further control, the entire existing source MACT standard, not just a MACT standard for an individual pollutant. Likewise, EPA must show that one existing source can meet the entire new source MACT standard. However, EPA fails to identify any sources that it can demonstrate can meet any proposed existing source or new source standard in any of the proposed regulations. Without showing “simultaneous achievability” for all HAP emitted from a process vent, EPA runs afoul of Judge Williams’ warning about “achievable” MACT standards not being achieved in practice.

Response: See preamble for discussion of the pollutant-by-pollutant approach and discussion of floors reflecting achieved performance.

EPA discussed the types of data it gathered on emissions from area sources in the notice of proposed rule and in the final rule. We acknowledged the data were limited. We have attempted to adjust statistically for the limited data set and variability within a unit by basing the limit on the [UPL].

Cost is not a relevant factor in determining the floor for a pollutant emitted from sources in source category or subcategory. Biomass and oil-fired units are not subject to numerical MACT-based limits in the area source boiler final rule. The subcategories in the area source rule reflect the need to address mercury and POM applying MACT to coal-fired sources in order to meet the 90 percent threshold requirement CAA section 112(c)(6). We have promulgated work practice standards for smaller coal-fired boilers (less than 10 MMBtu) because of our concerns about the technical and economic feasibility of applying numeric limits to smaller units.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 27

Comment: Forest products industry boilers often burn multiple types of fuels and are subject to frequent load swings. Therefore, the emissions from these boilers vary over the course of a day, depending on the fuel burned and the required steam production. EPA acknowledged during the Phase 2 ICR test program that emissions from industrial boilers are variable by requesting multi-year historical stack test data and conducting 30-day fuel and emissions monitoring studies. We believe that additional variability data and CEMS data were not adequately collected or reviewed in regards to this proposal. If it had, longer averaging times for CO limit would have been set. This is especially true since lengthening averaging times and incorporating variability seems to be EPA’s preferred approach for addressing emissions during startups, shutdowns, and malfunction periods. Most of the data collected during both phase 1 and phase 2 of the ICR was for major sources. Additionally, since EPA only asked for ‘the most recent stack test and 30 day data’ and only collected area source data coincidentally, even the ‘coincident’ data set response

was very limited. The court reviewing the Brick MACT authorized EPA to look at intra-unit variability and EPA's work on the Hazardous Waste Combustion MACT confirmed the importance of considering variability. Therefore, it is inappropriate for EPA to set limits under the area source rule that cannot be met consistently by top performing units under all potential operating conditions. We believe that the way to consider a unit's variability in emissions is to set a longer averaging time for compliance with an emission limit and that was not done in this proposal.

Response: See response to comment EPA-HQ-OAR-2006-0790-1958.1, excerpt 2 for discussion of the Brick MACT court decision.

Commenter Name: Don Kaiser

Commenter Affiliation: Pellet Fuels Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2231

Comment Excerpt Number: 1

Comment: No court decision has addressed squarely whether EPA may set a floor solely on the basis of emissions test data, without regard to the existence of a proven means of achieving the floor. The D.C. Circuit in the Brick MACT case, *Sierra Club v. EPA*, 479 F.3d 875 (2007), did not address that issue squarely. As characterized by EPA in the June 2010 proposal, the closest the court came to addressing that issue was to rule that "[M]oors for existing sources must reflect the average emission limitation achieved by the best-performing 12 percent of existing sources, not levels EPA considers to be achievable by all sources." 75 Fed. Reg. at 32009-10 (emphasis added). That is a different issue. A individual source within a particular subcategory may not be able to achieve a floor because of cost, even if a proven means of control is available to it from a technological standpoint.

Response: See response to comment EPA-HQ-OAR-2006-0790-1958.1, excerpt 2 for discussion of the Brick MACT court decision.

Commenter Name: Al Hankins, Jr.

Commenter Affiliation: Hankins Lumber Company, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1841.1

Comment Excerpt Number: 5

Comment: In reading the data tables used for the MACT floors, it appears that many of the biomass fired boilers that were included in the top 12% co-fired natural gas. If a standard is being set for biomass-fired boilers, then the dataset should only include those sources firing 100% biomass. This again presents opportunity for the data that EPA used to be skewed and not representative.

It is our understanding that there are no sources, including those that are in the top 12% for a pollutant, in EPA's database of boilers that could meet all of the currently-proposed Boiler MACT standards. This is very disconcerting, and implies that the current limits may be impossible to meet. We believe a more reasonable approach would be to establish the top performing sources for all five (5) pollutant categories simultaneously. This approach should be consistent with Clean Air Act criteria.

Response: See response to comment EPA-HQ-OAR-2006-0790-1958.1, excerpt 2 for discussion of the Brick MACT court decision.

Commenter Name: Alicia Oman

Commenter Affiliation: National Association of Manufacturers

Document Control Number: EPA-HQ-OAR-2006-0790-2234.1

Comment Excerpt Number: 13

Comment: It appears that EPA's decision in the proposed rule to equate best performance with lowest emissions, rather than with any other means of measuring performance, is based on a parenthetical phrase found in the Brick MACT decision, which refers to the "best performing" sources as "those with the lowest emission levels." This isolated statement is dictum; it is not a necessary underpinning of the Brick MACT decision, nor is it supported by any other D.C. Circuit decision.

In Brick MACT, the D.C. Circuit affirmed its decision in Cement Kiln that EPA cannot redefine "best performing" to mean those sources with emission levels achievable by all sources:

But EPA cannot circumvent Cement Kiln's holding that Section 7412(d)(3) requires floors based on the emission level actually achieved by the best performers (those with the lowest emission levels), not the emission level achievable by all sources.

Brick MACT, 479 F.3d at 880-81 (citing Cement Kiln, 255 F.3d at 861). EPA interprets this dictum (it was unnecessary to resolution of the issue before the court) to prohibit the adoption of any measure of "best performing" other than lowest emission levels. 75 Fed. Reg. 32010. This is an unnecessarily narrow view of the language in Brick MACT. For one, the Brick MACT decision did not overrule either of the Nat'l Lime or Sierra decisions, in which the D.C. Circuit approved approaches that did not simply equate "best performing" sources with "those with the lowest emission levels." Faced with demonstrably contradictory yet binding precedent, EPA has without explanation elected to follow non-binding language that would appear to place great restraint on EPA's discretion. It is arbitrary for EPA to attempt to apply its discretion in this manner when on other occasions it has repeatedly asserted its discretion to characterize "best performing" sources by criteria other than simply the lowest emission level.

Indeed, EPA has not explained why it views the parenthetical dicta in Brick MACT as legally-binding interpretation of the statutory language rather than simply an explanatory description of

the yardstick for measuring “best performers” in Cement Kiln. If the D.C. Circuit has been addressing the National Lime or Sierra cases, perhaps it would have used a different description of the “best performer” that comported with EPA’s approach in those rulemakings. There is simply no reason to read the Brick MACT language as globally and definitively the way EPA does here when there is an alternative interpretation that harmonizes Brick MACT with prior and still binding case law.

Furthermore, EPA’s interpretation of Brick MACT collides with Section 112(d)(3) and other D.C. Circuit decisions requiring EPA to take nontechnological and nonintentional factors into consideration if they impact emissions levels achieved in practice by sources, particularly as EPA is also advocating a “pollutant-by-pollutant” approach to setting the MACT floor. For example, if a source utilizes a technology that dramatically lowers its emissions of a particular HAP but at the same time increases its emissions of other HAPs or other air pollutants, EPA takes those factors into account when setting the MACT floor and must devise a reasonable way to address such factors in its methodology. But under EPA’s current interpretation of Brick MACT, EPA would be constrained to identify the lowest emitters of that particular HAP as the best performing sources regardless of any collateral negative impacts. The CAA clearly provides EPA with much more discretion than that.

EPA itself has, since Brick MACT, acknowledged its discretion to define “best performing” sources in a manner that accounts for all the relevant factors. Though EPA modified its approach in the final rule, in its notice of the proposed Hazardous Waste combustor (“HWC”) Reconsideration Rule, EPA justified using control efficiency, rather than the simplistic emissions levels, in defining “best controlled” and “best performing” hydrochloric acid production furnaces:

First, the statutory language requiring floors to be based on “best controlled” (new)/“best performing” (existing) does not specify whether “best” is to be measured on grounds of control efficiency or emission level. See *Sierra Club v. EPA*, 167 F.3d 658, 661 (“average emissions limitation achieved by the best performing 12 percent of units...on its own says nothing about how the performance of the best units is to be calculated”). The requirement that the new source floor reflect “emission control” achieved in practice reinforces that the standard can be determined and expressed in terms of control efficiency.

Existing floors determined and expressed in terms of control efficiency are likewise consistent with the requirement that the floor for existing sources reflect “average emission limitation achieved,” since “emission limitation” includes standards which limit the “rate” of emissions on a continuous basis—exactly what the standards do here. CAA section 302(k). Moreover, where Congress wanted to express performance solely in terms of numerical limits, rather than performance efficiency, it said so explicitly. See CAA section 129(a)(4).

Solicitation of Comments on Legal Analysis, 72 Fed. Reg. 54,875, 54,884 (Sept. 27, 2007). While the HWC Final Rule hews to the unduly narrow view of the Brick MACT decision embraced by EPA here, in it EPA nonetheless observed that “Standards requiring HAP reduction of a given percent limit the emission quantity, rate, and (in any realistic scenario) concentration

of the HAP and so falls squarely within the statutory definition [of emission standard].” See Reconsideration Final Rule, 73 Fed. Reg. 64,068, 64,087 (Oct. 8, 2008).

EPA takes an unnecessarily narrow view of Brick MACT, compelled neither by section 112 nor by the D.C. Circuit’s opinion itself, robbing itself of the discretion to engage in an analysis that reflects reality. EPA has historically demonstrated persuasively why the Agency might in its discretion choose some other or more complex measure of what a “best performing” source is. The data here indicates that such an approach—which accounts for operational and other variability that undermines any straightforward connection between the “lowest emitters” and the “best performing” sources—would be justified.

Response: See response to comment EPA-HQ-OAR-2006-0790-1958.1, excerpt 2 for discussion of the Brick MACT court decision.

Commenter Name: Alicia Oman

Commenter Affiliation: National Association of Manufacturers

Document Control Number: EPA-HQ-OAR-2006-0790-2234.1

Comment Excerpt Number: 16

Comment: EPA has, thus, violated the admonition that what is “achieved in practice” and what is “achievable” must be “in accord with common sense and the reasonable meaning of the statute”

EPA has exceeded its authority under 112 by paradoxically setting standards that are not “achievable” on the basis of emissions levels that have been “achieved” in practice by the better performing sources in the given subcategories. This outcome is an actual manifestation of what Judge Williams only hypothesized might occur in his concurrence in the “Brick MACT” decision. See *Sierra Club v. EPA*, 479 F.3d 875 (D.C. Cir. 2006) (“Brick MACT decision”).

Judge Williams observed in his concurrence this potential problem with the 112 standard setting procedures. He noted that 112(d)(3) requires MACT “floors” to be based on emission controls that have been achieved in practice, while the “above the floor” analysis required by 112(d)(2) is based on what is achievable. Taken together, he concluded that, “[t]he language thus embodies an assumption that standards based on achievability will be more stringent than ones based merely on past achievement.” *Id.* at 884.

In his view, this creates the possibility that what has been “achieved” under 112(d)(3) would not be “achievable” under 112(d)(2) – i.e., “as applied to some sources, the floor compelled by the statutory language appears to be more stringent than “beyond-the-floor.” *Id.* at 884-885. This creates the possibility that “we might be talking of a statute whose literal words produc[e] a result so demonstrably at odds with the intentions of its drafters as to justify judicial surgery.” *Id.* at 885 (internal punctuation and citations omitted).

Judge Williams concludes, however, that “happily” we do not face such a situation because the authority to subcategorize generally should allow the Agency to make sure “the relation between ‘achieved’ and ‘achievable’ is in accord with common sense and the reasonable meaning of the statute.” Id.

Unfortunately, the Agency’s rationale for subcategorization in the Industrial Boiler MACT proposal does not reflect any analysis of how the proposed subcategories will help assure that what has been “achieved” by the better performers in a proposed subcategory results in a standard that is “achievable” by the other sources in that subcategory. Consequently, as illustrated above, the resulting proposed standards are not reasonably achievable by a preponderance of affected sources. This result violates EPA’s obligation to determine subcategories and to otherwise structure the rule should that the requirement to set standards based performance that has been “achieved” does not overtake what is generally “achievable” by affected sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-1958.1, excerpt 2 for discussion of the Brick MACT court decision.

Commenter Name: Jim Griffin

Commenter Affiliation: American Chemistry Council

Document Control Number: EPA-HQ-OAR-2006-0790-1925.1

Comment Excerpt Number: 17

Comment: The Lowest-Emitting Sources Are Not Representative Of The Actual Performance Of The Best Performing Boilers, And EPA Should Use The Relative Performance Of Air Pollution Control Technology To Select The Best Performing Sources. EPA has established the proposed Boiler MACT floors by equating sources with the lowest emissions for particular HAPS with best performing sources and ignoring other measures of performance that might more accurately demonstrate the best performing sources.

Section 112(d)(3) requires the MACT floor be no less stringent than “the emissions control achieved in practice by the best controlled similar source” for new sources, and the “average emission limitation achieved by the best performing 12 percent of the existing sources,” for existing sources. Simply put, if Congress intended the MACT floor to be no less stringent than “the lowest emission levels” achieved by sources, it could have said so. “Best controlled” and “best performing” are not necessarily synonymous with the “lowest emission level.”

The D.C. Circuit has never required that EPA equate the “lowest emitting” sources to the “best performing” sources. See *Sierra Club v. EPA*, 167 F.3d 658, 661 (D.C. Cir. 1998) (section 112(d) “on its own says nothing about how the performance of the best units is to be calculated”). In its review of the 1999 Portland Cement MACT rule, the court endorsed a “technology approach” to setting the MACT standard, whereby EPA would use the relative

performance of air pollution control technology to select the best performing sources. In rejecting the view that emissions are the only factor EPA must consider, the D.C. Circuit stated:

According to the Sierra Club, section 7412(d)(3) requires EPA to set new source floors at the lowest recorded emission level for which it has data and existing source floors at the average of the lowest twelve percent of recorded emission levels for which it has data. Nothing in the statute, Sierra Club argues, permits the Agency to set floors based on the performance of technology as opposed to the recorded performance of plants.

In resolving this issue, we do not write on a clean slate. EPA's technology-based approach to setting new source emission standards has already faced and survived a Chevron one challenge. In *Sierra*, 334 U.S. App. D.C. 421, 167 F.3d 658, we reviewed a new source emission standard for solid waste combustion that EPA promulgated pursuant to section 7429, which establishes emission requirements virtually identical to section 7412's. There, as here, the Sierra Club argued that

EPA's MACT technology approach to setting emission standards is unambiguously forbidden by the Clean Air Act. *Sierra* rejected that argument, holding that EPA may estimate the performance of the best performing units and that it was not "impossible" that EPA's methodology constituted a reasonable estimation technique. See 167 F.3d at 665.

Nat. Lime Ass'n v EPA, 233 F.3d 625, 631 (D.C. Cir. 2000). Thus, the D.C. Circuit endorsed EPA's use of a technology-based approach that uses the relative performance of pollution control technology rather than simply looking to the sources with the lowest emissions test report to set the MACT floor.

Indeed, this was the approach adopted by EPA in the 2004 Boiler rule. There, EPA recognized that while it may be appropriate in certain circumstances to consider primarily available emissions test data, such an approach was ill-suited to setting the boiler MACT floor:

[A]fter review of the available HAP emission test data, we determined that it was inappropriate to use this MACT floor approach to establish emission limits for boilers and process heaters. The main problem with using only the HAP emissions data is that, based on the test data alone, uncontrolled units (or units with low efficiency add-on controls) were frequently identified as being among the best performing 12 percent of sources in a subcategory, while many units with high efficiency controls were not. However, these uncontrolled or poorly controlled units are not truly among the best controlled units in the category. Rather, the emissions from these units are relatively low because of the particular characteristics of the fuel that they burn, that cannot reasonably be replicated by other units in the category or subcategory. A review of the fuel analyses indicate that the concentration of HAP (metals, HCl, mercury) vary greatly, not only between fuel types, but also within each fuel type. Therefore, a unit without any add-on controls, but burning a fuel containing lower amounts of HAP, can have emission levels that are lower than the emissions from a unit with the best available add-on controls. If only the available HAP emissions data are used, the resulting MACT floor levels would, in most cases, be unachievable for many, if not most, existing units, even those that employ the most effective available emission control technology. 69 Fed. Reg. at 55,233 (emphasis added).

It appears that EPA's decision in this proposed area source rule to equate best performance with lowest emissions, rather than with any other means of measuring performance, is based on a parenthetical phrase found in the Brick MACT decision, which refers to the "best performing" sources as "those with the lowest emission levels." *Sierra Club v. EPA*, 479 F.3d 875, 879 (D.C. Cir. 2007). This isolated statement is dictum; it is not a necessary underpinning of the Brick MACT decision, nor is it supported by any other D.C. Circuit decision.

EPA seems to be relying on this dictum (it was unnecessary to resolve the issue before the court) to prohibit the adoption of any measure of "best performing" other than lowest emission levels. This is an unnecessarily narrow view of the language in Brick MACT, and is contrary to the position EPA took in its 2009 proposed NESHAP for the Portland Cement Manufacturing Industry. In that proposal, EPA solicited comments on ranking best performers based on removal efficiency rather than the lowest emitters. EPA legally supported this manner of ranking by, among other things, citing the court in *Sierra Club v. EPA*, 167 F.3d 658, 661 (D.C. Cir. 1999) "average emissions limitation achieved by the best performing 12 percent of units * * * on its own says nothing about how the performance of the best units is to be calculated." EPA then acknowledges that "the Brick MACT opinion states, arguably in dicta, that best performers are those emitting the least HAP." [FOOTNOTE 74 Fed. Reg. 21136, 21149 (May 2, 2009). (Emphasis in the original)]

It is important to note that the Brick MACT decision did not overrule either of the Nat'l Lime or Sierra decisions, in which the D.C. Circuit approved approaches that did not simply equate "best performing" sources with "those with the lowest emission levels." Faced with demonstrably contradictory yet binding precedent, EPA has without explanation elected to follow non-binding language that would appear to place great restraint on EPA's discretion. It is arbitrary for EPA to attempt to apply its discretion in this manner when on other occasions it has repeatedly asserted its discretion to characterize "best performing" sources by criteria other than simply the lowest emission level.

Indeed, EPA has not explained why it views the parenthetical dicta in Brick MACT as legally-binding interpretation of the statutory language rather than simply an explanatory description of the yardstick for measuring "best performers" in Cement Kiln. If the D.C. Circuit has been addressing the National Lime or Sierra cases, perhaps it would have used a different description of the "best performer" that comported with EPA's approach in those rulemakings. There is simply no reason to read the Brick MACT language as globally and definitively the way EPA does here when there is an alternative interpretation that harmonizes Brick MACT with prior and still binding case law.

Furthermore, EPA's interpretation of Brick MACT collides with Section 112(d)(3) and other D.C. Circuit decisions requiring EPA to take non-technological and non-intentional factors into consideration if they impact emissions levels achieved in practice by sources, particularly as EPA is also advocating a "pollutant-by-pollutant" approach to setting the MACT floor. For example, if a source utilizes a technology that dramatically lowers its emissions of a particular HAP but at the same time increases its emissions of other HAPs or other air pollutants, EPA takes those factors into account when setting the MACT floor and must devise a reasonable way to address such factors in its methodology. But under EPA's current interpretation of Brick

MACT, EPA would be constrained to identify the lowest emitters of that particular HAP as the best performing sources regardless of any collateral negative impacts. The CAA clearly provides EPA with much more discretion than that.

EPA itself has, since Brick MACT, acknowledged its discretion to define “best performing” sources in a manner that accounts for all the relevant factors. Though EPA modified its approach in the final rule, in its notice of the proposed Hazardous Waste combustor (“HWC”) Reconsideration Rule, EPA justified using control efficiency, rather than the simplistic emissions levels, in defining “best controlled” and “best performing” hydrochloric acid production furnaces:

First, the statutory language requiring floors to be based on “best controlled” (new)/”best performing” (existing) does not specify whether “best” is to be measured on grounds of control efficiency or emission level. See *Sierra Club v. EPA*, 167 F.3d 658, 661 (“average emissions limitation achieved by the best performing 12 percent of units...on its own says nothing about how the performance of the best units is to be calculated”). The requirement that the new source floor reflect “emission control” achieved in practice reinforces that the standard can be determined and expressed in terms of control efficiency. Existing floors determined and expressed in terms of control efficiency are likewise consistent with the requirement that the floor for existing sources reflect “average emission limitation achieved,” since “emission limitation” includes standards which limit the “rate” of emissions on a continuous basis—exactly what the standards do here. CAA section 302(k). Moreover, where Congress wanted to express performance solely in terms of numerical limits, rather than performance efficiency, it said so explicitly. See CAA section 129(a)(4).

Solicitation of Comments on Legal Analysis, 72 Fed. Reg. 54875, 54884 (Sept. 27, 2007). While the HWC Final Rule hews to the unduly narrow view of the Brick MACT decision embraced by EPA here, in the HWC rule EPA nonetheless observed that “Standards requiring HAP reduction of a given percent limit the emission quantity, rate, and (in any realistic scenario) concentration of the HAP and so falls squarely within the statutory definition [of emission standard].” See Reconsideration Final Rule, 73 Fed. Reg. 64,068, 64,087 (Oct. 8, 2008).

EPA takes an unnecessarily narrow view of Brick MACT, compelled neither by 112 nor by the D.C. Circuit’s opinion itself, robbing itself of the discretion to engage in an analysis that reflects reality. EPA has historically demonstrated persuasively why the Agency might in its discretion choose some other or more complex measure of what a “best performing” source is. The data here indicates that such an approach—which accounts for operational and other variability that undermines any straightforward connection between the “lowest emitters” and the “best performing” sources—would be justified.

Response: See response to comment EPA-HQ-OAR-2006-0790-1958.1, excerpt 2 for discussion of the Brick MACT court decision.

Commenter Name: Alicia Oman

Commenter Affiliation: National Association of Manufacturers

Document Control Number: EPA-HQ-OAR-2006-0790-2234.1

Comment Excerpt Number: 28

Comment: EPA must subcategorize sufficiently to ensure that emissions limits are consistent with the statutory scheme and achievable.

EPA's ability to subcategorize is a key tool in ensuring that MACT floors are achievable. In the Brick MACT decision, Judge Williams wrote about the need to use subcategorization to avoid imposing unreasonable or unachievable MACT floors:

What if meeting the "floors" is extremely or even prohibitively costly for particular plants because of conditions specific to those plants (e.g., adoption of the necessary technology requires very costly retrofitting, or the required technology cannot, given local inputs whose use is essential, achieve the "floor")? For these plants, it would seem that what has been "achieved" under 112(d)(3) would not be "achievable" under 112(d)(2) in light of the latter's mandate to EPA to consider here. . . . In other words, as applied to some sources, the floor compelled by the statutory language appears to be more stringent than "beyond-the-floor. [Footnote: A related House Report confirms that cost implications are relevant to all facets of MACT regulation by providing that "MACT is not intended to require unsafe control measures, or to drive sources to the brink of shutdown." HOUSE REP. NO. 101-490, Part 1, at 328.]

If this were all, we might be talking of a statute whose literal words produced a result so "demonstrably at odds with the intentions of its drafters" as to justify judicial surgery. . . .

Happily 112 is not such a statute. Section 112(d)(1) authorizes the Administrator to "distinguish among classes, types, and sizes of sources within a category or subcategory," [O]ne legitimate basis for creating additional subcategories must be the interest of keeping the relation between "achieved" and "achievable" in accord with common sense and the reasonable meaning of the statute.

Sierra Club v. EPA, 479 F.3d 875, 884-85 (D.C. Cir. 2007). Thus, EPA has not only the authority, but also the obligation to create subcategories where limits may be unachievable for certain units.

Response: See response to comment EPA-HQ-OAR-2006-0790-1958.1, excerpt 2 for discussion of the Brick MACT court decision.

Legal/Applicability: Requests for Extension of Comment Period

Commenter Name: Sarah Markham

Commenter Affiliation: Southern Company

Document Control Number: EPA-HQ-OAR-2006-0790-0071.1

Comment Excerpt Number: 1

Comment: The following letter is Southern Company's request to provide an extension of the public comment period for the following recently proposed rules:

Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units ("CISWI Rule")

Identification of Non-Hazardous Secondary Materials That Are Solid Waste ("Definition of Solid Waste (DSW) Rule")

National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters ("IB-MACT Rule")

National Emissions Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers ("Area Source Rule")

The proposed rules included a 45-day comment period, which EPA subsequently extended to 60-days in a Federal Register Notice dated June 13, 2010. The comment period for these rules officially ends on August 3, 2010. As explained below, despite the extension and the delay in the publication date, we believe that this is still an insufficient amount of time to fully evaluate these complicated and interrelated rules. Southern Company respectfully requests that the comment period be extended an additional 60 days (120-day comment period ending on October 2, 2010) to allow for a more thorough review of the proposed rules. Southern Company's justification for this request is provided as follows:

1. Additional Time Necessary to Review MACT Floor Data

Our ongoing review of the emissions data used in the MACT floor analysis provided by EPA thus far suggests that these data contain a number of potential errors that will significantly affect the underlying emissions floor calculations and, ultimately, the proposed emissions standards. The nature of these errors suggests that EPA did not perform an adequate quality assurance review of the data. Ensuring the quality of the underlying emissions data is fundamental to establishing any emissions standards. While the responsibility for these efforts can be debated, it is ultimately EPA's responsibility to provide defensible emissions standards.

Thus far, our review has focused on the emissions data used in the major source MACT rule, although a cursory review of the data used in the CISWI and area source rules suggests that these same types of errors exist in all the data. The data quality review process is very time intensive and it will be impossible for us to complete this task for the major source MACT rule, let alone the CISWI and area source rules, within the allotted comment period.

Southern Company acknowledges that EPA provided some of the ICR data used in the rulemaking in January 2010 and released subsequent updates to this data in the months leading up to the proposed rules. However, this information only included the emissions test results and did not contain the additional details necessary to verify many of the final emissions calculations that would be required for an adequate quality assurance review of the data. Southern Company and

many other affected sources were well aware of the level of effort that would be required for this task early on in the ICR process. However, despite repeated attempts to obtain early access to this additional data, EPA indicated that it would only provide the data when the rules are proposed. This inevitably forced affected sources to delay data review until the comment period, which, as stated previously, is insufficient for such an effort.

Southern Company understands the time constraints imposed on EPA for these rulemaking efforts, which may have resulted in limiting the scope of EPA's own data review effort. However, this does not obviate the fact that such a data review should be conducted prior to the floor analysis to avoid inefficiencies in the rulemaking process. Furthermore, both EPA and industry should be provided the same amount of time to review the data used in rulemaking. Had EPA provided greater transparency of the data during the ICR, this issue may have been avoided.

Given the amount of data involved and the complexity of some of the emissions tests, we believe additional time is necessary to perform a thorough review of the data used in the emissions floor calculations. Southern Company believes that is in the best interest of all parties to ensure that the data used in the rulemaking is of the highest quality possible.

2. Additional Time Necessary to Evaluate the Impact of Proposed Rules on Biomass Sources

Sources with biomass-fired units or planning construction of new biomass-fired units have been subject to considerable uncertainty regarding the applicability status of the IB-MACT and CISWI Rules. This uncertainty is largely due to the fact that EPA had not finalized a revised definition of non-hazardous solid waste prior to proposing these rules. While the proposed DSW Rule may clarify applicability for units burning clean woods, many units that burn or plan to burn adulterated woods may be affected under the CISWI Rule. The uncertainty for these sources still remains and is further complicated by EPA's proposed alternative definition of nonhazardous waste, which may increase the number of CISWI-affected units.

For biomass sources and the numerous industrial boilers that co-fire potentially non-hazardous solid waste, the implications of the proposed rules are significant and require careful evaluation in order to develop the best long-term strategy for the facility. This is particularly true for sources that are considering the construction of new biomass-fired units, as the classification could determine overall feasibility of the project.

Unfortunately, the proposed rulemaking requires that these sources evaluate all four rules simultaneously since the implications are interrelated. This raises an additional level of complexity by requiring sources to develop a number of contingencies in their evaluation that would not have otherwise been necessary if the rules had been developed sequentially. At the very least, EPA could have minimized this effort by finalizing the DSW rule before proposing the other rules. Nonetheless, the proposed comment period is more consistent with the timeframe allotted to a single MACT rulemaking effort and does not provide an adequate amount of time to make the much more complicated assessment of four interrelated rules.

Southern Company requests that EPA extend the public comment period on all of the proposed rules by an additional 60 days. Southern Company understands that EPA is under a court-ordered

deadline of December 16, 2010 to issue the final rules. However, EPA can renegotiate this deadline as they have done previously with the proposed rules.

Response: EPA thanks the commenter for the input and recognizes the constraints of the public comment period. Despite the court ordered schedule of this rulemaking EPA extended the comment period from July 19th, 2010 to August 3rd, 2010 (see 75 FR 42676). EPA also hosted three separate public hearings as well as several meetings with stakeholders. EPA also requested an extension for the final rulemaking but was denied this request and must finalize this rule by February 21st, 2011

Commenter Name: Kristine Krause

Commenter Affiliation: Wisconsin Electric Power Company, We Energies

Document Control Number: EPA-HQ-OAR-2006-0790-0350.1

Comment Excerpt Number: 1

Comment: Additional Time is Necessary to Evaluate the Impact of Proposed Rules on Small Coal-Fired Electric Utility Boilers

We Energies has several coal-fired electric utility boilers that will be directly affected under the proposed major source MACT rule. These boilers were constructed prior to EPA's New Source Performance Standards and it will likely be difficult to meet any proposed MACT emission standards without substantial capital investment, which may not be feasible given the age of the equipment. We will need to consider the impact of unit retirement, or repowering with a fuel that results in lower emissions of HAPs. This level of extensive review necessitates an extension of the current 60-day comment period.

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for extension of the comment period.

Commenter Name: Tim Manning

Commenter Affiliation: Hovensa L.L.C.

Document Control Number: EPA-HQ-OAR-2006-0790-0413.1

Comment Excerpt Number: 1

Comment: This letter is HOVENSA L.L.C.'s (HOVENSA) request for an extension of the deadline for public comments for the following recently proposed rules:

- National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.
- National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.

- Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units.

- Identification of Non-Hazardous Secondary Materials That Are Solid Waste.

The proposed rules include a 60-day period for regulated sources and the public to analyze and comment on these four complicated proposed rules. HOVENSA has reviewed the docket and supports the request for extension already provided by Southern Company, other regulated entities, and Trade Associations. A 60-day period is inadequate given the complexity and economic impact of the proposed rules.

HOVENSA, a joint venture between subsidiaries of Hess Corporation and Petroleos de Venezuela, S.A. (PDVSA), operates the second largest petroleum refinery in North America on the Caribbean island of St. Croix in the United States Virgin Islands. This refinery is one of the most modern in the United States with a crude oil processing capacity of 525,000 barrels per day (BPD). Due to HOVENSA's island location, the refinery has unique configurations and constraints that mainland refineries do not. Reviewing the proposed rules and providing a meaningful analysis is a time-consuming process; however, this process is more onerous for entities like HOVENSA who are so uniquely impacted by the proposed rules.

In conclusion, HOVENSA requests that EPA extend the public comment period on all the proposed rules by an additional 90 days. HOVENSA realizes that the EPA must meet a December 2010 judicial deadline to issue the final rules. However, EPA has successfully renegotiated similar deadlines for previously proposed rules.

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for extension of the comment period.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 7

Comment: In the past EPA has provided a minimum of 30 days for proposal comment and should have provided affected parties with 120 days to review and comment on these four interrelated rules, rather than the 60 days allowed. EPA should also then pursue with the court a similar extension to the promulgation date for these rules.

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for extension of the comment period.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 55

Comment: The health and potential impacts of these proposed rules demand fair and thorough consideration of all underlying data and information. In addition to the proposed rules themselves, the sheer volume of support documents and the gigabytes of supporting data require time to review so that constructive comments can be filed in a timely manner.

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for extension of the comment period.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 33

Comment: It is my opinion that the public is incapable of completing adequate review and comment on these rules by the scheduled comment date. The EPA should finalize a solid waste rule first so the regulated entities are in a position to know how it impacts the combustion rules. The Agency should seek additional time from the court as needed.

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for extension of the comment period.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 43

Comment: I've been a practicing professional in this field for more than 35 years, and I've grown up in the Clean Water Act regulations all the way until now, and -- and I've been helping industry comply with these for almost 40 years, and I have never seen -- you know, and I provided comments on rulemakings for all of those 40 years, and I have never seen a rule come out of the Agency that I think is clearly rushed.

It's not the kind of job that I've seen the EPA do customarily, when you can go and find in -- in a rather rapid and cursory review, the errors that I've identified, we have to know there are a multitude of other areas that are in these rules that I don't know who's going to have the time to look at them by August the 3rd.

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for extension of the comment period.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners, CIBO

Document Control Number: EPA-HQ-OAR-2006-0790-1783.1

Comment Excerpt Number: 3

Comment: The four interrelated rules raise an unprecedented number of issues for the EPA in determining the appropriate emissions standards for these very large, diverse source categories. Nevertheless, EPA provided only 60 days for regulated sources and other members of the public to analyze and comment on the rules. [see pdf for footnotes] Affected sources asked EPA for an additional 90-day period to permit affected sources to quality control data, review the database and analysis, consider EPA's proposed and alternative proposed regulatory options, and develop comments that would demonstrate the significant compliance problems with the standards as proposed. CIBO appreciated EPA's agreement to provide an additional three weeks for comment for three of the four rules (EPA did not extend the comment period for the Solid Waste Definition Rule).

It is important to be clear, however, that even with the three-week extension of the comment period, the time EPA allotted for comment for four interrelated rules of this complexity, broad application and economic impact failed to constitute the reasonable opportunity for public comment guaranteed by the CAA and the Administrative Procedures Act. 42 U.S.C. § 7607(h) (2006). In their request for comment to EPA, regulated sources made these and other points to EPA [See DCN: 2006-0790-1783.3 for Comment Extension Request and Description of the Development of the Boiler MACT Database]

Under basic principles of due process and administrative law, EPA must provide the public with a reasonable opportunity to comment on proposed rules. Under the CAA, 30-day comment period would be reasonable for a single, ordinary proposed rule. The truncated comment period violates the clear terms of the CAA and deprives sources of a means to adequately protect their interests and rights in the administrative and judicial processes.

The complexity, breadth of applicability, and economic impact of the proposed rules, and because EPA published the four rules simultaneously, demands even more time to comment, as regulated facilities must also assess the impact of the rules as they interrelate, raising many more operational and practical questions.

The rules will have an extraordinary impact in terms of applicability and compliance costs, covering what EPA estimates to be this scope of facilities nationwide: Boiler MACT Proposed Rule, 13,555 units located at 1,608 different facilities. 75 FR 32048; Proposed Area Sources Rule, 183,000 existing boilers at 91,000 facilities (75 FR at 31914, 31924) and 6,800 new boilers over the next three years (75 FR at 31914); CISWI Proposed Rule, 176 units (75 FR at 3195051); and the Solid Waste Definition Proposed Rule would cover sources at facilities in at least 85 NAICS codes (75 FR at 31845).

EPA allocated to itself 30 months to collect and analyze data to develop emissions standards and reserved for itself almost four months to review comments and prepare a final rule. In contrast to the 34 months that EPA has allocated to its own rulemaking efforts, EPA gave sources two months (and an additional three weeks) to evaluate the same data and proposed standards, and then write substantive comments that could meaningfully inform the rulemaking process.

EPA adopted a very aggressive timeframe for developing these rules and its database contained countless errors that sources needed to first quality control before analyzing the conclusions EPA reached in reliance on the data. EPA did not make MACT floor memo Excel files available in the docket for the Boiler rule until three weeks into the original 60-day comment period.

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for extension of the comment period.

Commenter Name: Chris Mello

Commenter Affiliation: Alaska Energy Authority

Document Control Number: EPA-HQ-OAR-2006-0790-1653.1

Comment Excerpt Number: 19

Comment: The State of Alaska and the Alaska Wood Energy Development Working Group request EPA provide more time for the State to further develop arguments that area source provisions are not appropriate for rural Alaska and to propose an alternative implementation plan for all industrial, commercial, and institutional boilers.

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for extension of the comment period.

Commenter Name: Arie Verloop

Commenter Affiliation: Jansen Combustion and Boiler Technologies, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1856.1

Comment Excerpt Number: 1

Comment: Our company, Jansen Combustion and Boiler Technologies, Inc. of Kirkland, WA, is concerned about the newly proposed Boiler MACT rules published by EPA on June 4 (Docket ID# EPA-HQOAR-2006-0790). The comment period is very short and the first action that should be taken is to increase the allotted time for comments beyond the current due date of August 23.

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for extension of the comment period.

Commenter Name: Robert Thornton
Commenter Affiliation: International District Energy Association
Document Control Number: EPA-HQ-OAR-2006-0790-2169.1
Comment Excerpt Number: 1

Comment: The four interrelated rules raise an unprecedented number of issues for the Agency in determining the appropriate emissions standards for these very large, diverse source categories. EPA provided only 60 days for comment. Affected sources asked EPA for an additional 90-day period to permit affected sources to quality control data, review the database and analysis, consider EPA's proposed and alternative proposed regulatory options, and develop comments that would demonstrate the significant compliance problems with the standards as proposed. IDEA appreciates EPA's agreement to provide an additional 3 weeks for comment for 3 of the 4 rules (EPA did not extend the comment period for the Solid Waste Definition Rule). However, even with the 3-week extension of the comment period, the time allotted for comment was inadequate for review and analysis of complex rules which will have enormous economic impact. IDEA does not believe that the timeline constitutes the reasonable opportunity for public comment guaranteed by the Clean Air Act and the Administrative Procedures Act. 42 U.S.C. § 7607(h) (2006).

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for extension of the comment period.

Legal/Applicability: Delegation of Authority

Commenter Name: Bill Wickman and Laurel Brent-Bumb
Commenter Affiliation: Sustainable Forest Action Coalition
Document Control Number: EPA-HQ-OAR-2006-0790-1487.1
Comment Excerpt Number: 4

Comment: Further, we request that EPA consider national differences in fuel usage, pollutant attainment levels, and flexibility that should be allowed to the state, air districts, and other agencies in determining MACT Floor limits.

SFAC's seventeen member counties are all considered small rural counties. All seventeen counties are in mountainous locations and are sparsely populated. Given this fact, the overall air quality impact is insignificant as well as being located in the center of a high carbon sequestration area with millions of acres of National Forests. Knowing this fact, it seems reasonable to consider a final rule that would provide local air districts with leeway to recognize these variations and not have a rule that is ridged and expected to be a one size fits all approach.

Response: EPA is required to set its rules at least as stringent as the statutory minima. Local agencies have the option to take delegation and develop more stringent standards. EPA has identified in the final rule which provisions cannot be delegated to localities. The final rule does not subject small boilers to numerical emission limits or testing to meet these (nonexistent) limits.

While EPA's RIA accounts for the benefits associated with non-HAP reductions, including CO, the purpose of the CO limit for large coal-fired sources is to establish that the source is using good combustion, which minimizes the production of the HAP POM. We also note that the final rule does not establish a MACT-based limit for CO from oil-fired boilers at area sources.

Commenter Name: Chris Mello

Commenter Affiliation: Alaska Energy Authority

Document Control Number: EPA-HQ-OAR-2006-0790-1653.1

Comment Excerpt Number: 1

Comment: The comments in this document focus on small biomass boilers with a heat input capacity less than 10 million BTU per hour.

The State of Alaska reviewed the proposed rule -National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters." The State of Alaska does not believe the costs and logistical concerns associated with implementing this proposed rule in rural Alaska justify the minimal emission reductions. The proposed requirements for requiring tighter emission standards and annual testing are expensive, redundant, and unnecessary. We urge EPA to not promulgate the NESHAP area source provisions on rural Alaska and allow the state to prepare an alternative implementation plan for all industrial, commercial, and institutional boilers.

II. Background

On April 29, 2010, the Environmental Protection Agency (EPA) issued a proposed rule that would reduce emissions of toxic air pollutants from existing and new industrial, commercial, and institutional boilers located at area source facilities. The proposed rule would reduce emissions of a number of toxic air pollutants including mercury, metals, and organic air toxics, which include dioxins. In 2013, EPA estimates 110 to 300 premature deaths nationwide would be avoided by implementing this proposed rule.

The proposal would regulate boilers located at area source facilities that burn coal, oil, or biomass, or non-waste materials, and the regulations would be based on boiler design. Also, the proposal would set different requirements for large and small boilers. Large boilers have a heat input capacity equal to or greater than 10 million British thermal units per hour (Btu per hr). Small boilers have a heat input capacity less than 10 million Btu per hour.

The rule requires small boilers installed before June 4, 2010 to meet the emission standards through documented bi-annual maintenance practices. Small boilers installed after June 4, 2010 will have to meet emission standards through documented maintenance practices and annual stack testing. Manufacturers will be required to meet the tighter CO regulations based on MACT and particulate regulations based on GACT.

Response: See response to comment EPA-HQ-OAR-2006-0790-1487.1, excerpt 4 for discussion of delegation of authority.

Commenter Name: Gary Rubenstein

Commenter Affiliation: Kauai Island Utility Cooperative, KIUC

Document Control Number: EPA-HQ-OAR-2006-0790-2028.1

Comment Excerpt Number: 3

Comment: Chapter 6 of the RIA discusses the benefits of the regulatory proposal under two main subsections—“Calculation of PM_{2.5} Human Health Benefits,” and “Unquantified Benefits.” The first subsection deals entirely with the topic of ambient PM_{2.5} health impacts. While we do not dispute the importance of reducing ambient PM_{2.5} levels, the area-source CO emission limits proposed for existing oil-fired boilers that are area sources are not justified by this discussion. The only justification given is that the regulatory proposal, as a whole, will reduce VOC and PM emissions and that VOC is a precursor of PM_{2.5}. It would be improper to rely on the basic VOC-PM_{2.5} precursor relationship as justification for MACT limits on existing oil-fired boilers that are area sources. The underlying authority of the proposed regulation is to reduce specific HAPs from specific sources listed under Section 112(c)(3) and 112(c)(6) of the CAA.

While important, PM_{2.5} emission reductions are not the intent of CAA Section 112, and would more properly be regulated via State Implementation Plans (SIPs) adopted pursuant to Section 110, which are intended to implement, enforce, and maintain the primary National Ambient Air Quality Standards.¹⁰ It is expected that PM_{2.5} control measures adopted as part of SIPs would first focus on reducing directly emitted PM_{2.5} emissions and precursors, and would not rely on MACT-level reductions of POM for existing oil-fired boilers that are area sources. Therefore, any progress towards achieving or maintaining PM_{2.5} attainment under the NAAQS resulting from the regulatory proposal should be framed as a coincidental secondary benefit, and not as the primary basis of the regulatory proposal.

A discussion of the Proposed Rule’s health benefits resulting from reductions in HAP emissions is found under the “Unquantified Benefits” subsection of the RIA. This subsection is further divided into discussion of CO health benefits, SO₂ health benefits, and HAP benefits. With regard to CO and SO₂ benefits, we again note that Section 110, not Section 112, of the CAA is intended to enforce the NAAQS for these pollutants. Coincidental and secondary reductions (if any) in ambient concentrations of CO and SO₂ cannot be used as the basis for requiring MACT for POM emissions from existing oilfired boilers that are area sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-1487.1, excerpt 4 for discussion of delegation of authority.

Commenter Name: Hank Russell

Commenter Affiliation: Cuolumne County Economic Development Authority

Document Control Number: EPA-HQ-OAR-2006-0790-1658.1

Comment Excerpt Number: 4

Comment: We request that EPA consider national differences in fuel usage, pollutant attainment levels, and flexibility that should be allowed to the state, air districts, and other agencies in determining MACT Floor limits.

Response: See response to comment EPA-HQ-OAR-2006-0790-1487.1, excerpt 4 for discussion of delegation of authority.

Commenter Name: Chris Mello

Commenter Affiliation: Alaska Energy Authority

Document Control Number: EPA-HQ-OAR-2006-0790-1653.1

Comment Excerpt Number: 10

Comment: Given the cost considerations of implementing these rules in rural Alaska and the questionable authority to implement the area source provisions in non-urban areas, we urge EPA to not promulgate the NESHAP area source provisions on rural Alaska and allow the state to prepare an alternative implementation plan for all industrial, commercial, and institutional boilers.

Response: See response to comment EPA-HQ-OAR-2006-0790-1487.1, excerpt 4 for discussion of delegation of authority.

Commenter Name: Michael A. Livermore

Commenter Affiliation: Institute for Policy Integrity New York University School of Law

Document Control Number: EPA-HQ-OAR-2006-0790-1899.1

Comment Excerpt Number: 1

Comment: EPA has proposed three related actions under Sections 112 and 129 of the Clean Air Act (“CAA”), hereinafter referred to as the Major Source Proposal, the Area Source Proposal, and the Incinerator Emissions Proposal.¹ While these proposals make significant progress within the existing structure of the Clean Air Act, the current statutory framework is excessively complex. A set of local market-based programs would be more economically efficient while meeting the same environmental goals. Such a program would solve many of the regulatory issues that EPA is now facing. However, the current statute likely does not give EPA discretion to implement such programs. EPA should make recommendations to Congress that would give them that authority.

Response: See response to comment EPA-HQ-OAR-2006-0790-1487.1, excerpt 4 for discussion of delegation of authority.

Commenter Name: Arnold Schwarzenegger
Commenter Affiliation: Governor of the State of California
Document Control Number: EPA-HQ-OAR-2006-0790-1777.1
Comment Excerpt Number: 6

Comment: The proposed MACT Standards did not take into account California's long history of comprehensive toxics control programs. ARB's statewide air toxics program was established in the 1983 under the Toxic Air Contaminant Identification and Control Act (AB 1807, Tanner) which created California's program to reduce exposure to air toxics. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, Connelly 1987) supplemented the AB 1807 program, by requiring a statewide air toxics inventory as well as notification of people exposed to a significant health risk. Facilities that are found to pose a significant health risk to the community are required to reduce their risk below the level of significance through a risk management plan. All HAPs identified by U.S. EPA are included in California's list of toxic air contaminants (TAC) and additional chemicals have also been added to the list by ARB, based on toxicity and potential exposure. Over 600 substances have been listed under the Act.

In addition, districts include a TAC review during the permitting process for new and modified facilities. Sources emitting TACs must comply with district requirements regarding risk assessment and risk management of TAC emissions. Screening analyses and health risk assessments are performed as part of the permitting process. In the case of unacceptable health risks, districts require mitigation to reduce the risk.

Since the goal of U.S. EPA in developing any MACT standard is to reduce public exposure to hazardous air pollutants, any analysis conducted should include consideration of existing state programs that accomplish or contribute to the same goal.

Response: See response to comment EPA-HQ-OAR-2006-0790-1487.1, excerpt 4 for discussion of delegation of authority.

Commenter Name: Tim W. Sonnichsen
Commenter Affiliation: Sonnichsen Engineering, LLC
Document Control Number: EPA-HQ-OAR-2006-0790-2139.1
Comment Excerpt Number: 2

Comment: In-place state HAP's emission control programs are superior to the proposed MACT rules

The EPA promulgated a series of HAP emission control guidelines in the 1990's. On numerous occasions, I have worked with the guidelines that have since been put into statute by the State of Washington. The statutes impose requirements to demonstrate by EPA approved engineering analyses that the HAP's emitted from an individual boiler do not adversely impact ambient air

quality nor pose a local health concern. The analyses are site-specific involving the design of the boiler, emissions controls applied, and local topographical features. These procedures are far superior and meaningful than the “blanket” emission standards proposed under the MACT rules.

Response: See response to comment EPA-HQ-OAR-2006-0790-1487.1, excerpt 4 for discussion of delegation of authority.

Commenter Name: Mat Ehrhardt

Commenter Affiliation: California Air Pollution Control Officers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1995.1

Comment Excerpt Number: 6

Comment: California’s aggressive approach to controlling HAP emissions:

The proposed MACT Standards did not take into account California’s long history of air toxics control programs. The Air Toxics "Hot Spots" Information and Assessment Act (the Act) (AB 2588, 1987, Connelly) requires the ARB to compile and maintain a list of substances posing chronic or acute health threats when present in the air. Over 600 substances have been listed under the Act. The Act also requires existing facilities to report their air toxics emissions, ascertain health risks, and to notify nearby residents of significant risks. Facilities that pose a significant health risk to the community are required to reduce their risk below the level of significance through a risk management plan. In addition, districts include a review of proposed toxic air contaminant (TAC) emissions increases, and their associated risk, during the permitting process for new and modified facilities. Sources emitting TACs must comply with district requirements regarding risk assessment and risk management of TAC emissions. Screening analyses and health risk assessments are performed as part of the permitting process. In the case of unacceptable health risks, districts will require mitigation to reduce the risk, and will generally not permit a project that cannot be so mitigated. In addition, a new or modified source, as well as existing sources, may be subject to State’s mandated airborne toxic control measures promulgated by the ARB. EPA should provide an option that allows equivalency with the MACT Standards for states that have stringent air toxics programs such as California.

Response: See response to comment EPA-HQ-OAR-2006-0790-1487.1, excerpt 4 for discussion of delegation of authority.

Commenter Name: Kyle Gibeault

Commenter Affiliation: Biomass Thermal Energy Council, BTEC

Document Control Number: EPA-HQ-OAR-2006-0790-1914.1

Comment Excerpt Number: 20

Comment: Looking at the proposed MACT standards from a 30,000 foot policy level, the potential benefit to society vs. the potential cost is way out of balance. As shown in the BTEC

comments, hydrocarbons do not increase significantly until CO levels get well above 500 ppm. According to the EPA's Air Pollutant Emission Trends particulate emissions have decreased 80% since 1940 and PM 2.5 decreased 14% between 2000 and 2006. States –other than Massachusetts and a few others –were doing a fine job of regulating the biomass energy industry. The Federal Government's proposed involvement will cost a lot more than resulting incredibly marginal benefit to the environment generated by these proposed regulation.

Response: See response to comment EPA-HQ-OAR-2006-0790-1487.1, excerpt 4 for discussion of delegation of authority.

Commenter Name: Myra C. Reece

Commenter Affiliation: South Carolina Department of Health and Environmental Control

Document Control Number: EPA-HQ-OAR-2006-0790-1859.1

Comment Excerpt Number: 26

Comment: Requests for alternative operating limits and alternative monitoring parameters must be submitted to the EPA Administrator for review and approval. Since this subpart can be implemented and enforced by the EPA or a delegated authority such as South Carolina, it is unclear whether the authority to review alternative operating limits and alternative monitoring parameters would also be delegated to a state or local agency.

Response: See response to comment EPA-HQ-OAR-2006-0790-1487.1, excerpt 4 for discussion of delegation of authority.

Commenter Name: Lee B. Zeugin

Commenter Affiliation: Utility Air Regulatory Group

Document Control Number: EPA-HQ-OAR-2006-0790-1957.1

Comment Excerpt Number: 35

Comment: In a number of provisions, EPA proposes to require submission of information to either “the Administrator,” [Footnote: Proposed 63.7520(a) (requiring, if requested, submission of the test plan to the Administrator pursuant to 63.7) and §3.7521 (requiring submission of a fuel analysis plan to the Administrator for review and approval).] the “permitting authority,” [Footnote: Proposed 63.7505(d)(1) (requiring submission of a site-specific monitoring plan for approval).] or the “regulatory authority.” [Footnote: Proposed 63.7522(g) (requiring submission of averaging plans to the applicable regulatory authority for review and approval).] While the use of site-specific plans may not be unreasonable, the requirement to submit some plans to the Administrator and some plans to the “permitting authority” is confusing. Moreover, because “permitting authority” is not defined, in cases where EPA acts as the permitting authority for some programs, or where a state or local regulatory agency has several permitting programs run by different staff, it may not be clear to whom the plan should be sent. EPA should clarify who it intends to receive and approve such submittals.

Response: See response to comment EPA-HQ-OAR-2006-0790-1487.1, excerpt 4 for discussion of delegation of authority.

Legal/Applicability: CBI

Commenter Name: Alicia Oman

Commenter Affiliation: National Association of Manufacturers

Document Control Number: EPA-HQ-OAR-2006-0790-2234.1

Comment Excerpt Number: 48

Comment: The energy assessment will require sources to submit data that in many cases constitutes confidential business information.

A requirement that an energy assessment be conducted for energy systems served by all combustion units that are affected sources would require evaluation of confidential processes and systems. Since these evaluations and resulting information do not reflect the control of HAP emissions, EPA has no authority to require that sources provide this information. Even if EPA were to expressly indicate that such data provided does not constitute emissions data, and may therefore be protected from dissemination as confidential business information, this approach still does not resolve EPA's lack of authority to compel its submission in the first instance. In addition, CBI protections are not absolutely protective of sensitive data, as they are discretionary and always subject to evaluation and reevaluation by EPA.

Although current CAA CBI regulations permit a source to designate information provided to EPA as CBI, the type of information EPA proposes to compel companies to report here is, by legal definition, CBI. 40 C.F.R. 2.301(e) (allowing information to be designated as trade secret, proprietary or company confidential). Therefore, EPA should not permit competitors to force reporting entities to defend the nature of this data in an agency CBI proceeding. Whether such information constitutes CBI should not be assessed on a case-by-case basis. Instead, it should be given categorical protection because the entire class of information EPA is seeking here constitutes CBI, it is not emissions data and its collection is outside EPA's 112 authority.

Response: The commenter asserts that the "entire class" of information required to be reported under the energy assessment provision is CBI without attempting to substantiate how the test for CBI is met. Simultaneously, the commenter says that "in many cases" the information would be CBI, which by implication admits that in at least some cases, the information should not be treated as CBI. Rather than EPA guessing which may be the case, a categorical exemption based on the record before the agency has not been justified. The Agency will entertain appropriate claims for CBI protection on a case-by-case basis.

Legal/Applicability: Minimum of Five Data Points

Commenter Name: Carl Johnson

Commenter Affiliation: Southern Pressure Treaters' Association

Document Control Number: EPA-HQ-OAR-2006-0790-0870.1

Comment Excerpt Number: 8

Comment: In closing, we would like to stress the importance of not setting limits on thousands and thousands of boilers based on data from only a few boilers. The Agency should use all available data and obtain additional data to insure a proper analysis is performed. In some instances the limits are based on only one or two data points with obvious errors in the various data sets.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Margaret E. Sheehan

Commenter Affiliation: Energy Justice Network

Document Control Number: EPA-HQ-OAR-2006-0790-1053.1

Comment Excerpt Number: 5

Comment: A request that the EPA choose to calculate the MACT standard using the measurement of the best performing 12 percent of existing sources

If the EPA chooses to calculate the MACT standard using the top five best performing sources, the EPA should not use that measurement unless it is stricter than the measurement of the best performing 12 percent of existing sources.

The MACT based standards for existing sources can be less stringent than standards for new sources, but they cannot be less stringent than the average emission limitation achieved by the best performing 12 percent of existing sources in the same category.²⁵ However, in cases where there are 30 or more sources but little emission data, this results in only a few units setting the existing source floor with the result that the new and existing source MACT floors are almost identical. *Id.* In contrast, according to the Clean Air Act, [See Reference 26 in submittal.] if these subcategories had less than 30 sources, the EPA would be required to use the top five best performing sources, rather than the one or two that comprise the top 12 percent.

The EPA states that the MACT standards CANNOT be less stringent than the average emission limit achieved by the best performing 12 percent of existing sources in the category. Exceptions to this standard should not be made unless, as the EPA states, there are fewer than 30 sources of data to be measured. The benchmark of 30 sources should be followed. To do otherwise would open a floodgate of procedural questions of when exceptions should or should not be made.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Jim Hickman

Commenter Affiliation: Langdale Forest Product Company

Document Control Number: EPA-HQ-OAR-2006-0790-1379.1

Comment Excerpt Number: 5

Comment: EPA should use all of the available data and get additional data, if needed, to avoid setting limits for thousands of boilers based on data from only a few. In some cases, the proposed limits are based on only one or two data points, and there are apparent errors in various data sets.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Rich Raiders

Commenter Affiliation: Arkema Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1958.1

Comment Excerpt Number: 3

Comment: In the proposed standards is the use of smaller floor samples. In the Hydrochloric Acid Production (“HCl”) MACT standard at 40 CFR 63 Subpart NNNNN, EPA was faced with MACT categories containing less than the standard 30 production units, where 12% of the floor membership constitutes five affected sources. In this rule, as required at § 112(d)(3)(B), EPA used at least five sources to set a floor for a source category. However, EPA inexplicably deviates from their prior MACT setting policy for several CISWI source categories. Any source category calculated with data from less than five units is, by statute, invalid. EPA must recalculate all existing source standards using less than five sources in the floor.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Michael Bradley

Commenter Affiliation: The Clean Energy Group

Document Control Number: EPA-HQ-OAR-2006-0790-1689.1

Comment Excerpt Number: 4

Comment: As the Clean Energy Group has previously noted in comments related to potential electric sector NESHAPs, MACT floors for non-coal subcategories (i.e., oil) are often set based on less than five units when EPA has data for only a few units in a subcategory. Thus, there are situations where a potential subcategory has greater than 30 units, but the MACT floor may be set by fewer than five units if EPA lacks data for many units. Perversely, subcategories with

fewer units (e.g., less than 30) are guaranteed a more robust MACT floor based on at least five units. For example, the mercury subcategory coal has data for nine units, resulting in a MACT floor set by only two units. However, the subcategory is much larger than nine, and these nine units may not be representative of the category. Using five would lessen the chance that the MACT floor is set by non-standard units.

Congress clearly recognized the problems inherent in setting a MACT floor based on less than five units and sought to prevent this result. The Clean Energy Group recommends that EPA interpret Congressional intent as calculating each MACT floor with a minimum of five data sources if five are available. If five are not available, EPA should seek additional data to achieve a MACT floor properly representative of the emissions of each subcategory's best performing units.

While we support EPA using all available resources to ensure full representation of the sector or subcategory, several floors proposed in this rule are based on very few data points, potentially magnifying any errors or unrepresentative situations.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners, CIBO

Document Control Number: EPA-HQ-OAR-2006-0790-1783.1

Comment Excerpt Number: 4

Comment: The rules would also benefit significantly from the generation of additional emissions information. EPA's MACT Floor tables indicate that eleven of the thirty MACT Floor emission limitations for existing sources were determined using less than five sources due to a lack of available data [see pdf for footnotes] No time was allocated for additional data-gathering.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Kerry Flick

Commenter Affiliation: Metso Power

Document Control Number: EPA-HQ-OAR-2006-0790-1490.1

Comment Excerpt Number: 5

Comment: The proposed rule defines thresholds for limits related to only certain toxic air pollutants. Limitation setting is to be "based on the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emissions information), in the category or subcategory for categories and subcategories with 30 or more

sources." (CAA section 112(d)(3)(A)). Unfortunately, as evidenced by the data published, there are only a few plants available in the United States that provide all the specific emissions information. Although the sample population is not nearly adequate, it has nevertheless been used to establish the proposed emissions levels for both existing and new facilities. It is Metso's opinion that this is not fair representation, particularly when the fuel source is as varied as biomass. The information contained in the Federal Register itself, clearly questions the relevance of the limited number of existing sources and asks Congress for its interpretation of CAA Section 112(d)(3)(B), and the necessity to obtain data from at least the top five (5) existing facilities. We feel that Congress must insist on maintaining this minimum requirement. If a complete set of data is not available from a minimum of five operating units, the EPA should be directed to look further, possibly toward the European community, to support establishment of the MACT floor criteria for both new and existing units.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Rob Barton and Ralph Roberson

Commenter Affiliation: Southern Company

Document Control Number: EPA-HQ-OAR-2006-0790-1978.1

Comment Excerpt Number: 7

Comment: RMB believes that EPA has misinterpreted the intent of the statutory requirement for calculating the emissions floors for existing units for subcategories containing less than 30 sources. According to Section 112(d)(3)(B), "Emission standards promulgated under this subsection for existing sources in a category or subcategory may be less stringent than standards for new sources in the same category or subcategory but shall not be less stringent, and may be more stringent than—

(A) the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emissions information), excluding those sources that have, within 18 months before the emission standard is proposed or within 30 months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the lowest achievable emission rate (as defined by section 171) applicable to the source category and prevailing at the time, in the category or subcategory for categories and subcategories with 30 or more sources, or

(B) the average emission limitation achieved by the best performing 5 sources (for which the Administrator has or could reasonably obtain emissions information) in the category or subcategory for categories or subcategories with fewer than 30 sources."

The key phrase in whether to apply the 12% Rule (Criteria A) was "in the category or subcategory for categories and subcategories with 30 or more sources". This suggests that the 12% Rule is applied regardless of the number of sources in the subcategory for which emissions data were available as long as the subcategory contained at least 30 sources. Likewise, Criteria B

would only apply to subcategories with less than 30 sources regardless of the number of sources for which emissions data were available. A literal interpretation of the statute suggests that a subcategory with greater than 30 sources could be adequately represented by less data than an equivalent subcategory with less than 30 sources. Obviously, this logic is flawed and the ambiguity in the statute becomes apparent.

Although Criteria (A) does not clearly specify a de minimis number of emissions data from which to derive the 12% best performing units, it seems clear that Congress intended to do so by virtue of the fact that they specified a de minimis for smaller subcategories (5). Although it would seem more appropriate that larger subcategories have a higher de minimis so that the larger subcategory has the equivalent representation as the smaller subcategory, RMB believes that the best approach in this case may be to simply use the same de minimis for the smaller subcategories. Therefore, we recommend that EPA consider estimating the emissions floor based on data from at least five sources for subcategories containing more than 30 sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Cheryl Johncox

Commenter Affiliation: Minneapolis Neighbors for Clean Air

Document Control Number: EPA-HQ-OAR-2006-0790-1971

Comment Excerpt Number: 11

Comment: EPA requests input on whether in cases where only a few facilities are in a category, MACT standards may be set using the top five best performers rather than the top 12 percent. However, the Clean Air Act is straightforward in stating that MACT standards cannot be less stringent than the average emission limit achieved by the best performing 12 percent of existing sources in the category. Exceptions to this standard should not be made. To do otherwise would open a floodgate of procedural questions of when exceptions should or should not be made. To the extent that EPA is facing this issue, it begs the question of whether the agency has not perhaps subcategorized the different types of boilers too finely.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Robert L. Garfield

Commenter Affiliation: Food Industry Environmental Council

Document Control Number: EPA-HQ-OAR-2006-0790-1835.1

Comment Excerpt Number: 12

Comment: We believe the data that EPA gathered to support these rules reflects bias, is incomplete, and is fundamentally flawed. EPA's data collection efforts to support these rules

were biased toward so-called “top performing facilities.” EPA directed its information requests to units that it had reason to believe were the better performing units in each subcategory. This tainted sample has resulted in proposed standards that are inordinately stringent, not representative of the overall subcategories to which they apply, and not in accord with the legal standards.

In addition, despite the decade and a half long process that lead to the proposed rules, the Agency based the standards on a relatively minute pool of relevant data. This is best demonstrated by the fact that EPA is faced with the question of what to do about subcategories of over 30 sources where data is so limited that the top 12% is represented by only one or two sources. 75 Fed. Reg. 32022. Given that the Clean Air Act requires EPA consider at least five sources in such a situation, the ultimate solution to this concern would have been to have collected more data in the first place.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Jeffery S. Hannapel

Commenter Affiliation: National Association for Surface Finishing

Document Control Number: EPA-HQ-OAR-2006-0790-1840.1

Comment Excerpt Number: 16

Comment: In addition, the emissions information on which the proposal is based is limited, inaccurate, and not representative of the population of boilers covered by the rule. Unless EPA substantially augments and improves these data, the standard will not be supported by the underlying record.

Response: See response to comment EPA-HQ-OAR-2006-0790-1958.1, excerpt 3 for discussion of minimum of five data points.

Commenter Name: John C. deRuyter

Commenter Affiliation: DuPont

Document Control Number: EPA-HQ-OAR-2006-0790-1964.1

Comment Excerpt Number: 3

Comment: Floors in some cases are established using one or two emissions tests since that represents 12% of the data available. One or two units cannot be representative of any of the subcategories for this rule due to the sheer number and diversity of combustion devices and fuels. DuPont supports use of at least 5 units for establishing any floors, but those units must not be one-off units that are not representative of other units in the subcategory.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Charles R. Faulds

Commenter Affiliation: Texas Electric Cooperatives, Treating Division

Document Control Number: EPA-HQ-OAR-2006-0790-1641.1

Comment Excerpt Number: 3

Comment: EPA should use all the available data and get additional data, if needed, to avoid setting limits for thousands of boilers based on data from only a few. In some cases, the proposed limits are based on only one or two data points and there are some apparent errors in the various data sets.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Bill Thomas

Commenter Affiliation: Shuqualak Lumber Company

Document Control Number: EPA-HQ-OAR-2006-0790-1948.1

Comment Excerpt Number: 6

Comment: It appears that EPA has set many MACT floors based on just a few data points. Is it our understanding that it was the intent of Congress to establish a MACT floor using a minimum of five (5) sources irrespective of how many sources were in the sub-category.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Robert E. McKenna

Commenter Affiliation: Motor and Equipment Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1920.1

Comment Excerpt Number: 10

Comment: Despite the decade and a half long process that lead to the proposed rules, the Agency based the standards on a relatively minute pool of relevant data. This is best demonstrated by the fact that EPA is faced with the question of what to do about subcategories of over 30 sources where data is so limited that the top 12 percent is represented by only one or two sources. 75 Fed. Reg. 32022. Given that the Clean Air Act requires EPA consider at least five sources in such a situation, the ultimate solution to this concern would have been to have collected more data in the first place.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Bob Perry

Commenter Affiliation: FirstEnergy Corp

Document Control Number: EPA-HQ-OAR-2006-0790-1959.1

Comment Excerpt Number: 11

Comment: RMB believes that EPA has misinterpreted the intent of the statutory requirement for calculating the emissions floors for existing units for subcategories containing less than 30 sources. According to Section 112(d)(3)(B), “Emission standards promulgated under this subsection for existing sources in a category or subcategory may be less stringent than standards for new sources in the same category or subcategory but shall not be less stringent, and may be more stringent than:

(A) the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emissions information), excluding those sources that have, within 18 months before the emission standard is proposed or within 30 months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the lowest achievable emission rate (as defined by section 171) applicable to the source category and prevailing at the time, in the category or subcategory for categories and subcategories with 30 or more sources, or

(B) the average emission limitation achieved by the best performing 5 sources (for which the Administrator has or could reasonably obtain emissions information) in the category or subcategory for categories or subcategories with fewer than 30 sources.”

The key phrase in whether to apply the 12% Rule (Criteria A) was “in the category or subcategory for categories and subcategories with 30 or more sources”. This suggests that the 12% Rule is applied regardless of the number of sources in the subcategory for which emissions data were available as long as the subcategory contained at least 30 sources. Likewise, Criteria B would only apply to subcategories with less than 30 sources regardless of the number of sources for which emissions data were available. A literal interpretation of the statute suggests that a subcategory with greater than 30 sources could be adequately represented by less data than an equivalent subcategory with less than 30 sources. Obviously, this logic is flawed and the ambiguity in the statute becomes apparent.

Although Criteria (A) does not clearly specify a de minimis number of emissions data from which to derive the 12% best performing units, it seems clear that Congress intended to do so by virtue of the fact that they specified a de minimis for smaller subcategories (5). Although it would seem more appropriate that larger subcategories have a higher de minimis so that the larger subcategory has the equivalent representation as the smaller subcategory, RMB believes that the best approach in this case may be to simply use the same de minimis for the smaller

subcategories. Therefore, we recommend that EPA consider estimating the emissions floor based on data from at least five sources for subcategories containing more than 30 sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: John Hopewell

Commenter Affiliation: American Coatings Association

Document Control Number: EPA-HQ-OAR-2006-0790-2062.1

Comment Excerpt Number: 1

Comment: ACA believes that EPA incorrectly calculated the emission limits for existing sources. The Clean Air Act in Section 112(d)(3) stipulates that the emission limits be calculated as follows:

A. the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emissions information) [...], or B. the average emission limitation achieved by the best performing 5 sources (for which the Administrator has or could reasonably obtain emissions information) in the category or subcategory for categories or subcategories with fewer than 30 sources.

For this source category, EPA estimated that there are over 182,000 existing affected units.² EPA interpreted 112(d)(3) to impermissibly reduce the pool of sources from which emission limits are calculated. In every case, EPA used the results from less than 0.1% of the sources in the category to calculate the emission limits. A similar situation exists in the companion proposal for Major Sources.³ Unlike the Area Source proposal, EPA raises the question in the Major Source proposal of whether it is appropriate to establish limits based on the performance of very few sources. EPA states that “it seems evident that Congress was concerned that floor determinations should reflect a minimum quantum of data.”⁴ For these reasons, EPA should not base a standard on fewer than 5 sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Chelly Reesman

Commenter Affiliation: JR Simplot Company

Document Control Number: EPA-HQ-OAR-2006-0790-2244

Comment Excerpt Number: 1

Comment: EPA determined the Maximum Achievable Control Technology (MACT) Floor by ranking sources based on emissions and identified the, lowest emitting 12 percent of the, sources for each Hazardous Air Pollutant (HAP). Information for emissions of these HAPs was extremely limited for coal-fired and wood-fired area source boilers. For mercury emissions

from coal-fired boilers, twelve percent of the sample size was two boilers. Emission limits for carbon monoxide as a surrogate for POM were based on 3 boilers. The number of boilers is too small to use as a basis for emissions limits for mercury and carbon monoxide. Because the floor was established based on a pollutant, rather than equipment, it is not clear that there are boilers in existence or available in the market place that can comply with all the emission limits proposed in this standard.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Abbie Krebsbach
Commenter Affiliation: Montana Dakota Utilities Co
Document Control Number: EPA-HQ-OAR-2006-0790-1975.1
Comment Excerpt Number: 2

Comment: Section 112(d)(3)(B) provides that for source categories with less than 30 sources, the EPA is to base the MACT floor on an average of the best performing five sources (for which the Administrator has or could reasonably obtain emissions information). It seems clear from these sections that the intent of the CAA was to apply a sufficient amount of source data to develop appropriate MACT standards.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: William Rogers
Commenter Affiliation: DTE Energy
Document Control Number: EPA-HQ-OAR-2006-0790-2159.1
Comment Excerpt Number: 3

Comment: EPA has requested comment on whether it should consider five sources rather than just one or two when setting existing source MACT limits. As the intent of Congress was to have the floor determination based on adequate data, considered evident by EPA, it would certainly be appropriate for EPA to establish MACT limits based on no fewer than five best performing units.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Charles B. Jones, III
Commenter Affiliation: Georgia Traditional Manufacturers Association
Document Control Number: EPA-HQ-OAR-2006-0790-1923.1

Comment Excerpt Number: 3

Comment: EPA's data collection efforts were biased towards "top performing" facilities, as it directed requests to units that it had reason to believe were the better performing units in each category. The result is a set of standards that are inordinately stringent and not reflective of the subcategories to which they apply. Moreover, the data being relied on by EPA is severely limited. There are subcategories of over 30 sources where data is so limited that the top 12% is represented by one or two sources. 75 Fed. Reg. 32022. GTMA agrees with other groups that the Clean Air Act requires EPA to consider at least five sources in this situation, but at a minimum more data should have been collected in the first place.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Lewis F. Gossett

Commenter Affiliation: South Carolina Manufacturers Alliance

Document Control Number: EPA-HQ-OAR-2006-0790-2196.1

Comment Excerpt Number: 4

Comment: SCMA does not believe EPA can justify the proposed mercury limit with just data from 9 sources, and then only 2 representing the 12% best controlled sources, when there are hundreds or maybe thousands of coal burning area source boilers in the U.S. Lowering the mercury limit from the original 9 lb/TBtu limit in the original vacated major source boiler MACT (original subpart DDDDD from 9/12/04) to 3 lb/TBtu in this proposed area source rule cannot be justified from such a small sampling of sources. Many sources that are currently emitting just over 3 lb/TBtu will potentially spend tens or hundreds of thousands of dollars to reduce mercury emissions by fewer than sixteen ounces. At approximately 1 lb of mercury compounds produced for every 10,000 tons of coal burned, many sources burning between 10,000 and 50,000 tons of coal per year may be just over the proposed limit and be required to eliminate a pound of mercury at a considerable expense.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Al Hankins, Jr.

Commenter Affiliation: Hankins Lumber Company, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1841.1

Comment Excerpt Number: 4

Comment: It appears that EPA has set many MACT floors based on just a few data points. Is it our understanding that it was the intent of Congress to establish a MACT floor using a minimum of five (5) sources irrespective of how many sources were in the subcategory. Based on

comments from others, it appears there are also many errors in the data sets that were used. Finally, we are concerned about the quality of all the data used for establishing the MACT floors. Has any of the data been validated independently, or by EPA? What if data was flawed/poorly reported/contained errors/was misinterpreted? Should this be the basis of industry-changing regulations?

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Rob Barton

Commenter Affiliation: RMB Consulting and Research

Document Control Number: EPA-HQ-OAR-2006-0790-2140.1

Comment Excerpt Number: 5

Comment: RMB believes that EPA has misinterpreted the intent of the statutory requirement for calculating the emissions floors for existing units for subcategories containing less than 30 sources. According to Section 112(d)(3)(B), “Emission standards promulgated under this subsection for existing sources in a category or subcategory may be less stringent than standards for new sources in the same category or subcategory but shall not be less stringent, and may be more stringent than—

(A) the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emissions information), excluding those sources that have, within 18 months before the emission standard is proposed or within 30 months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the lowest achievable emission rate (as defined by section 171) applicable to the source category and prevailing at the time, in the category or subcategory for categories and subcategories with 30 or more sources, or

(B) the average emission limitation achieved by the best performing 5 sources (for which the Administrator has or could reasonably obtain emissions information) in the category or subcategory for categories or subcategories with fewer than 30 sources.”

The key phrase in whether to apply the 12% Rule (Criteria A) was “in the category or subcategory for categories and subcategories with 30 or more sources”. This suggests that the 12% Rule is applied regardless of the number of sources in the subcategory for which emissions data were available as long as the subcategory contained at least 30 sources. Likewise, Criteria B would only apply to subcategories with less than 30 sources regardless of the number of sources for which emissions data were available. A literal interpretation of the statute suggests that a subcategory with greater than 30 sources could be adequately represented by less data than an equivalent subcategory with less than 30 sources. Obviously, this logic is flawed and the ambiguity in the statute becomes apparent.

Although Criteria (A) does not clearly specify a de minimis number of emissions data from which to derive the 12% best performing units, it seems clear that Congress intended to do so by virtue of the fact that they specified a de minimis for smaller subcategories (5). Although it would seem more appropriate that larger subcategories have a higher de minimis so that the

larger subcategory has the equivalent representation as the smaller subcategory, RMB believes that the best approach in this case may be to simply use the same de minimis for the smaller subcategories. Therefore, we recommend that EPA consider estimating the emissions floor based on data from at least five sources for subcategories containing more than 30 sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Rob Barton

Commenter Affiliation: RMB Consulting and Research, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-2198.1

Comment Excerpt Number: 5

Comment: RMB believes that EPA has misinterpreted the intent of the statutory requirement for calculating the emissions floors for existing units for subcategories containing less than 30 sources. According to Section 112(d)(3)(B), “Emission standards promulgated under this subsection for existing sources in a category or subcategory may be less stringent than standards for new sources in the same category or subcategory but shall not be less stringent, and may be more stringent than—

(A) the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emissions information), excluding those sources that have, within 18 months before the emission standard is proposed or within 30 months before such standard is promulgated, whichever is later, first achieved a level of emission rate or emission reduction which complies, or would comply if the source is not subject to such standard, with the lowest achievable emission rate (as defined by section 171) applicable to the source category and prevailing at the time, in the category or subcategory for categories and subcategories with 30 or more sources, or

(B) the average emission limitation achieved by the best performing 5 sources (for which the Administrator has or could reasonably obtain emissions information) in the category or subcategory for categories or subcategories with fewer than 30 sources.”

The key phrase in whether to apply the 12% Rule (Criteria A) was “in the category or subcategory for categories and subcategories with 30 or more sources”. This suggests that the 12% Rule is applied regardless of the number of sources in the subcategory for which emissions data were available as long as the subcategory contained at least 30 sources. Likewise, Criteria B would only apply to subcategories with less than 30 sources regardless of the number of sources for which emissions data were available. A literal interpretation of the statute suggests that a subcategory with greater than 30 sources could be adequately represented by less data than an equivalent subcategory with less than 30 sources. Obviously, this logic is flawed and the ambiguity in the statute becomes apparent.

Although Criteria (A) does not clearly specify a de minimis number of emissions data from which to derive the 12% best performing units, it seems clear that Congress intended to do so by virtue of the fact that they specified a de minimis for smaller subcategories (5). Although it would seem more appropriate that larger subcategories have a higher de minimis so that the larger subcategory has the equivalent representation as the smaller subcategory, RMB believes that the best approach in this case may be to simply use the same de minimis for the smaller subcategories. Therefore, we recommend that EPA consider estimating the emissions floor based on data from at least five sources for subcategories containing more than 30 sources.

Response: We disagree with the comment that it is contrary to the statute to set a MACT floor based on information from fewer than 5 sources. We note that the statute requires all major sources to have a MACT-based limit. Under the interpretation of the commenter, it would be impossible to fulfill the statute in categories or subcategories with 4 or fewer major sources. This issue is moot in the area source rule because there were more than 5 sources relied on for all MACT-based limits (i.e., Hg and POM from coal-fired units).

With respect to the argument that we must have data on at least 30 units in order to use the average of the top 12% of units method to calculate the floor for a category or subcategory, the statute says that we are to calculate the floor using “the average emission limitation achieved by the best performing 12 percent of existing sources (for which the Administrator has emissions information) . . . in the category or subcategory for categories or subcategories with 30 or more sources.” We note that the qualifying parenthetical “for which the Administrator has information,” attaches to the phrase “the best performing 12 percent of existing sources” and not “30 or more sources.” The plain language of the statute directs the approach EPA has adopted. There is no reference in CAA section 112(d)(3)(A) to requiring data on at least 5 units, or 30 units, or some other number for this provision to apply. Functionally, this puts the onus on industry to provide EPA with quality data in advance of the rulemaking or during the rulemaking process. Congress could have intended this result because information on source emissions generally is generated by sources in the first instance. Thus, EPA has no basis to ignore the natural reading of the text by applying an “absurd results” gloss.

Commenter Name: Michael Hutcheson

Commenter Affiliation: Ameren Corp.

Document Control Number: EPA-HQ-OAR-2006-0790-2012.1

Comment Excerpt Number: 6

Comment: Section 112(d)(2) of the Act states that the “Emission standards promulgated under this Subsection ... shall require the maximum degree of reduction of emissions of the hazardous air pollutants subject to this section...that the Administrator, taking into consideration the cost of achieving such emission reduction ... determines is achievable”. Section 112(d)(3) defines the maximum degree of reduction in emissions that is deemed achievable as (1) the emission control that is achieved in practice by the best controlled similar source for new sources and (2) no less than the average emission limitation achieved by the best performing 12 percent of existing

sources or the best performing 5 sources in source categories (or subcategories) with fewer than 30 sources. A direct reading of this subsection of the Act indicates that if there is test data from fewer than 30 sources, MACT standards can be no less than the average emission limitation achieved by the best performing 5 sources. The language in this section of the Act clarifies through parenthetical insertion that the number of sources in a subcategory is determined by the number of sources “for which the Administrator has emissions information”. It is incredulous to think that Congress wanted the US EPA to develop MACT standards for source categories with thousands of different sources from fewer than five (5) data points when it requires the use of at least 5 data points for categories with fewer than 30 sources. Despite this requirement, US EPA has established MACT floors based on less than 5 source tests. This is directly contrary to basic scientific and probabilistic principles and therefore contrary to the Administrators statements on the use of good science in making policy decisions.

Subsection 112(d)(3)(b) of the Act requires that MACT standards for existing sources be no less than “the average emission limitation achieved by the best performing 5 sources (for which the administrator has or could reasonably obtain emissions information) in the category or subcategory for categories or subcategories with fewer than 30 sources.” A direct reading of this subsection of the Act indicates that if there is test data from fewer than 30 sources, MACT standards can be no less than the average emission limitation achieved by the best performing 5 sources. The language in this section of the Act clarifies through parenthetical insertion that the number of sources in a subcategory is determined by the number of sources “for which the Administrator has or could reasonably obtain emissions information”. This same parenthetical clarification for what is in the universe of sources in the second line must also hold true when the subsection identifies that this paragraph is required when the universe of sources is less than 30. It is incredulous to think that Congress wanted the US EPA to develop MACT standards for source categories with hundreds of different sources from fewer than five (5) data points when it requires the use of at least 5 data points for categories with fewer than 30 sources. Despite this requirement, US EPA has established MACT floors based on less than 5 source tests. This is directly contrary to the Act as well as the Administrators statements on the use of good science in making policy decisions and appears to be manipulation of data to achieve a desired result (tighter limits).

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Chris V. Isaacson

Commenter Affiliation: Alabama Forestry Association

Document Control Number: EPA-HQ-OAR-2006-0790-2060

Comment Excerpt Number: 6

Comment: The available emissions data are not of sufficient quantity and quality to support the proposed MACT approach to area source emissions limitations. The limited data result in unachievable standards that are not justified under the facts or the law.

The emissions data on which EPA relies are scant, inaccurate, and not representative of the population of boilers that will be subject to the rule. In short, the data are utterly inadequate to support the proposed standards - especially with regard to the proposed existing source numeric standards. When using a 112(d) approach to standard setting, the statute requires EPA to determine MACT according to the "available" emissions information; however, this does not excuse EPA from using its resources and information gathering authority to obtain enough data to adequately characterize the units that will be subject to the rule. The Agency's failure to collect sufficient information is arbitrary and capricious and compromises the validity of the proposed standards.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Chris V. Isaacson

Commenter Affiliation: Alabama Forestry Association

Document Control Number: EPA-HQ-OAR-2006-0790-2060

Comment Excerpt Number: 7

Comment: The amount of data is wholly inadequate. Per the floor memo, [Footnote: EPA-HQ-OAR-2006-0790-0049] EPA has collected very little emission data: no emission data for POM for any subcategory, no mercury emission data for the liquid subcategory, mercury emission data for only 9 coal boilers and 2 biomass boilers, no state regulations or permit data for mercury or POM, limited emissions data for CO (5 coal boilers, 30 wood boilers, and 68 oil boilers)

EPA has estimated that there are almost 183,000 existing area source boilers at 92,000 facilities (3,710 coal, 10,958 biomass, and 168,003 liquid), [Footnote: EPA-HQ-OAR-2006-0790-0037] so the small amount of data collected is representative of the performance of less than 1 percent of these boilers. Of course, for purposes of setting the existing source standard, EPA uses data from the top 12% of units for which data are available, which in this case represents an even smaller fraction of the units. So, EPA proposes to set a standard applicable to thousands of boilers based on data from less than 0.1% of the units in the subcategory. This data record is facially insufficient.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Jay C. Moon

Commenter Affiliation: Mississippi Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-2000

Comment Excerpt Number: 9

Comment: Despite the decade and a half long process that lead to the proposed rules, the Agency based the standards on a relatively minute pool of relevant data. This is best demonstrated by the fact that EPA is faced with the question of what to do about subcategories of over 30 sources where data is so limited that the top 12% is represented by only one or two sources. 75 Fed. Reg. 32022. Given that the Clean Air Act requires EPA consider at least five sources in such a situation, the ultimate solution to this concern would have been to have collected more data in the first place.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: A. Steven Young

Commenter Affiliation: Association of Independent Corrugated Converters

Document Control Number: EPA-HQ-OAR-2006-0790-1994.1

Comment Excerpt Number: 10

Comment: In addition, despite the decade and a half long process that lead to the proposed rules, the Agency based the standards on a relatively minute pool of relevant data. This is best demonstrated by the fact that EPA is faced with the question of what to do about subcategories of over 30 sources where data is so limited that the top 12% is represented by only one or two sources. 75 Fed. Reg. 32022. Given that the Clean Air Act requires EPA consider at least five sources in such a situation, the ultimate solution to this concern would have been to have collected more data in the first place.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Bruce A. Steiner

Commenter Affiliation: American Coke and Coal Chemicals Institute

Document Control Number: EPA-HQ-OAR-2006-0790-2007

Comment Excerpt Number: 14

Comment: The EPA database is also deficient in other ways. For example, EPA has dioxin data for five sources in the Gas 2 Subcategory (arguably applicable to process gas-fired units if not otherwise exempted as discussed below) but uses only one source to determine the MACT floor for existing sources. The Clean Air Act requires a minimum of five sources to calculate reasonable MACT floors for existing sources. EPA's approach would set MACT floors for existing units equal to those for new units, which is inconsistent with the statutory structure. As another example, EPA uses a single data point to set Hg and hydrochloric acid (HCl) limits for Gas 2 units, and only two data points for the PM MACT limit. EPA has abused its discretion by establishing MACT floors for Gas 2 units without collecting adequate data to support the MACT calculation as Congress intended.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Alicia Oman

Commenter Affiliation: National Association of Manufacturers

Document Control Number: EPA-HQ-OAR-2006-0790-2234.1

Comment Excerpt Number: 14

Comment: The Clean Air Act does not allow EPA to rely on only on 1-2 data points to set limits for certain subcategories with more than 30 units in the subcategory. In order to follow Congress's intent, EPA needs to use at least the 5 lowest values to set the limits, as the Agency would be required to do if the subcategory had fewer than 30 units.

EPA explains in the proposal that “the proposed new and existing source MACT floors are almost identical [in three instances] because the best performing 12 percent of existing units (for which we have emissions information) is only one or two sources.” 75 Fed. Reg. 32022. EPA further explains that, “[t]he reason we look to the best performing 12 percent of sources, even though we have data on fewer than 5 sources, is that these subcategories consist of 30 or more units.” Id. The Agency believes that a “plain reading” of § 112(d)(3)(A) requires it to use the top 12% of sources for which it has emissions data for source categories with 30 or more sources, even in cases where the available emissions data are limited, such that the top 12% is represented by only one or two sources.

As a possible alternative to this approach, EPA asks for comment on whether “we should consider reading the intent of Congress to allow us to consider five sources rather than just one or two.” Id. EPA suggests that, by requiring data from 5 sources to be used for source categories with fewer than 30 sources, Congress was concerned that the floor should be determined using “a minimum quantum of data.” EPA posits that, if 5 is the “minimum quantum” for source categories with fewer than 30 sources, then it is natural to conclude that the “minimum quantum” should be no less than 5 source for categories with 30 or more sources.” Id.

Manufacturers support EPA's proposed alternative approach of using no fewer than 5 sources in setting the MACT floor for any source category – regardless of the number of sources in the category or subcategory. Congress clearly anticipated enough emissions information to be available for larger source categories to generally cause more than 5 sources to constitute the top 12%. It makes no sense for Congress to specify a minimum number of sources for source categories with few sources, but then to create a rule that would allow for standards to be set using data from fewer than 5 sources in larger source categories. Using no less than 5 sources would give effect to the clear intention of Congress.

We also note that the word “sources” as used in the last clause of 112(d)(3)(A) and (B) is ambiguous and, therefore, susceptible to reasonable interpretation by the Agency. As EPA

explains in the preamble, the word “sources” might be construed to refer to all sources in the given category or subcategory. *Id.* However, the word “sources” in the first clause of 112(d)(3)(A) and (B) clearly refers to the sources for which EPA has “emissions information.” Notably, the second use of the word “sources” in 112(d)(3)(A) also clearly is a reference to sources for which EPA has “emissions information.” So, it is reasonable to conclude that Congress intended the word “sources” to have a consistent meaning for all purposes under these specific provisions of 112(d). In other words, the reference “30 or more sources” at the end of 112(d)(3)(A) and “fewer than 30 sources” at the end of 112(d)(3)(B) reasonably should be construed as a reference to sources for which EPA has emissions information. This interpretation avoids the “absurd results” described above and allows for EPA to naturally reconcile the application of 112(d)(2)(A) and (B) such that the number of sources for which EPA has emissions information in a given category or subcategory dictates whether 112(d)(2)(A) or (B) should apply.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Lee B. Zeugin

Commenter Affiliation: Utility Air Regulatory Group

Document Control Number: EPA-HQ-OAR-2006-0790-1957.1

Comment Excerpt Number: 15

Comment: In the proposed IB MACT rule, EPA has established emission floors based on the MACT floor for certain subcategories on emissions data from less than five sources even though the subcategory contains more than 30 units. EPA has requested comments on whether it should set existing source MACT limits based on the emissions of at least five “best performing” units in larger subcategories (more than 30 units) when only limited emissions data are available. 75 Fed. Reg. 32,022. UARG believes it should.

Section 112(d)(3)(A) requires EPA to set MACT limits for existing sources based on “the average emission limitation achieved by the best performing 12 percent of the existing sources (for which the Administrator has emissions information).” For source categories with fewer than 30 sources, existing source MACT floors are to set based on “the average emission limitation achieved by the best performing 5 sources (for which the Administrator has or could reasonably obtain emissions information).” CAA § 112(d)(3)(B). Read together, these two provisions indicate that Congress intended MACT standards to be set on no less than five “best performing” units. Otherwise, Congress would not have included the phrase “could reasonably obtain emissions information” in § 112(d)(3)(B). It is fair to assume that Congress never contemplated the situation where the amount of available data from a large source category or subcategory would require EPA to set MACT limits based on the performance of only one or two sources. For example, if there were 1000 units in a source category but EPA only had emissions data from ten of those sources, then a restrictive reading of § 112(d)(3)(A) would require EPA to set an existing source MACT on the basis of one unit (12% of 10) -- the exact same way EPA would set the new source MACT limit for the category. This simply makes no sense given the structure

of § 112(d)(3). The better interpretation of Congress' intent in drafting § 112(d) is that no fewer than five "best performing" units must be used in setting existing source MACT limits.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Commenter Name: Lee B. Zeugin

Commenter Affiliation: Utility Air Regulatory Group

Document Control Number: EPA-HQ-OAR-2006-0790-1957.1

Comment Excerpt Number: 68

Comment: We are seeking comment on whether, with the facts of this rulemaking, we should consider reading the intent of Congress to allow us to consider five sources rather than one or two. First, it seems evident that Congress was concerned that floor determinations should reflect a minimum quantum of data: At least data from 5 sources for source categories of less than 30 sources. Second, it does not appear that this concern would be any less for subcategories with 30 or more sources.¹⁸

Granted, the mathematics used by Congress in crafting sections 112(d)(3) (A) and (B) leave a bit to be desired (e.g., for a category with 31 sources use the average of the best 12 percent or — 4, while a category with 29 sources — use the average of the best 5). That said (and as EPA acknowledges), Congress clearly realized that at least some minimum number of sources, five for example, are needed to determine an achievable limit for existing sources. It is simply inconceivable that Congress would require a minimum of five sources for a category with 30 or less sources and be satisfied with average only one or two sources in a category with more than 30 sources.

Response: See response to comment EPA-HQ-OAR-2006-0790-2140.1, excerpt 5 for discussion of minimum of five data points.

Legal/Applicability: 112(h): Technical and Economic Limitations

Commenter Name: David Meierhenry

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-0414.1

Comment Excerpt Number: 8

Comment: I support the EPA's conclusion in section V.D.1.(a)(4) of the preamble that it is not feasible or practical to require stack tests on boilers less than 10 MMBtu/hr.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: Charles Niebling

Commenter Affiliation: New England Wood Pellet

Document Control Number: EPA-HQ-OAR-2006-0790-0836

Comment Excerpt Number: 2

Comment: Absence of data on smaller biomass boilers and various biomass fuel types Defining all boilers less than 10 MMBtu/hr as “Small” Area Source Boilers, per the proposed rule, ignores the differing design characteristics of truly small boilers. EPA is making incorrect assumptions about the capabilities of commercial biomass boilers from 25,000 Btu to 2 MMBtu; this is especially evident when only boilers >10 MMBtu/hr were used to determine EPA’s PM limits, while CO emission limits were developed with boilers >1.6 MMBtu/hr.

A representative dataset of existing (small, i.e. <10 MMBtu/hr) commercial biomass boilers would include units at rural businesses, institutional sites, and farms; they often emit PM at levels in excess of 1.0 lb/MMBtu. Without these and other small-scale commercial boilers included in the dataset, and without a diversity of biomass fuel types, the data is biased towards the subset of the very best performing boilers and is not a representative sample of the actual biomass boiler population.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: N/A

Commenter Affiliation: Sierra Club, Earth Justice, Clean Air Task Force, Natural Resources Defense Council

Document Control Number: EPA-HQ-OAR-2006-0790-1982.1

Comment Excerpt Number: 16

Comment: SETTING WORK PRACTICE STANDARDS IN LIEU OF EMISSION STANDARDS FOR UNITS WITH A HEAT INPUT CAPACITY LESS THAN 10 MM/BTU WOULD BE UNLAWFUL AND ARBITRARY.

EPA proposes to set work practice standards under § 112(h) in lieu of emission standards for boilers with a heat input capacity less than 10 MMBtu. 75 Fed. Reg. at 31906. The agency asserts that it is “not feasible to enforce” emission standards for these units because of certain technological and economic limitations. Id.

With respect to technical limitations, EPA claims that boilers with capacities less than 10 MMBtu “generally” have stacks less than twelve inches in diameter, that the standard method of measuring PM may block a significant portion of the stack. Id. EPA also claims “many area source boilers” do not currently have sampling ports or a platform for accessing the stack. Id. With respect to economic limitations, EPA states that the compliance costs of conducting an

annual stack test for mercury and PM and a continuous emissions monitor (CEM) for CO would be greater than three percent of average revenue for seventy-nine percent of area source boilers.

EPA's claims about technical and economic limitations on the enforcement of emission standards for boilers with heat input capacity less than 10 MMBtu do not satisfy Clean Air Act § 112(h)'s conditions for setting work practice standards in lieu of emission standards. Section 112(h)(1) allows the agency to do so only if it is "not feasible to prescribe or enforce an emission standard." 42 U.S.C. § 7412(h)(1). Section 112(h)(2) then defines that phrase, in relevant part, to mean that "the application of measurement methodology to a particular class of sources is not practicable due to technological or economic limitations." 42 U.S.C. § 7412(h)(2) (emphasis added).

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: Robert D. Bessette

Commenter Affiliation: Council of Industrial Boiler Owners, CIBO

Document Control Number: EPA-HQ-OAR-2006-0790-1783.1

Comment Excerpt Number: 21

Comment: EPA has relied on its authority under CAA § 112(h) to impose a work practice standard in lieu of emission limits in certain situations. EPA is proposing tune-ups as the work practice standard for the control of HAP emissions. 75 FR 31901. EPA has authority to prescribe work practice standards in lieu of emission limitations in circumstances where it is not feasible to enforce such a standard. Under the CAA, a work practice standard can be relied on when "the application of measurement technology to a particular class of sources is not practicable due to technological and economic limitations." 42 USC § 7412(h). EPA determined that a work practice standard is appropriate to limit the emissions of mercury and CO (as a surrogate for POM) for existing area source boilers that have a heat input capacity of less than 10 MMBtu/hr. 75 FR 31906.

CIBO agrees that PM and mercury limits are not necessary for existing biomass and oil fired boilers at area sources. The emissions at these sources are not significant and the emission controls required for biomass and oil fired boilers would not be cost effective. EPA has requested comment whether a higher threshold should be set for requiring work practices instead of numerical emission limitations. While CIBO generally supports work practice standards, EPA's decision to limit work practice standards to units less than 10 MMBtu/hr is arbitrary. CIBO proposes that EPA extend the work practices standard to units with a designed heat input capacity of less than 30 MMBtu/hr. Many units with heat input capacities between 10 MMBtu/hr and 30 MMBtu/hr experience similar issues and costs that would have a "significant adverse economic impact" on facilities. The cost analysis prepared by EPA was limited to "small units" and EPA did not, but should have, performed a similar cost analysis for subsets of units with heat input capacities greater than 10 MMBtu/hr to determine if further application of work practice standards is justified. In a similar situation, EPA has imposed work practice standards for units

with a designed heat input capacity of less than 30 MMBtu/hr under the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc. EPA could apply the same rationale here considering many units less than 30 MMBtu/hr do not have the controls in place to test for emissions.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: Thomas A. Julia

Commenter Affiliation: Composite Panel Association

Document Control Number: EPA-HQ-OAR-2006-0790-1651.1

Comment Excerpt Number: 1

Comment: Additional size subcategories are needed since boiler capacity has a large impact in real world operation. An initial consideration for size categories could be to depend on the size classifications established for boilers under the New Source Performance Standards (NSPS). Regarding the size subcategorization decision in the proposal, EPA asked commenters, “We are specifically requesting comment on whether a threshold higher than 10 MMBTU/hr. meets the technical and economic limitations as specified in section 112(h).” We believe that the technical considerations used to set the NSPS subpart D(c) limits at 30 MMBTU/hr. are more than adequate to justify extending the threshold to that capacity level. There is a strong economic argument to this extension as well. Many small businesses specifically avoided boilers that triggered NSPS thresholds in the past because they could not afford the extra expense of NSPS requirements. Many of these boilers were, nonetheless, above 10 MMBTU/hr. Thus, expanding the threshold to 30 MMBTU/hr. would proportionately benefit small business operations. It is our recommendation that this subcategory be modified and that the threshold be moved from 10 to 30 MMBTU/hr. for oil and wood fired boilers to reflect the thresholds in the NSPS.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: David J. Prior

Commenter Affiliation: New York State Energy Research and Development Authority, NYSERDA

Document Control Number: EPA-HQ-OAR-2006-0790-1913.2

Comment Excerpt Number: 16

Comment: New boilers should not be exempted from the recommended emissions limits above due to narrow stack diameters. Regulating by stack diameter provides an unreasonable loophole for technologies. Boiler models less than 2 mmBtu/h can be tested prior to installation.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: Arthur N. Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management, NESCAUM

Document Control Number: EPA-HQ-OAR-2006-0790-2137.1

Comment Excerpt Number: 22

Comment: While we understand EPA's analysis and subsequent recommendation not to require controls on existing units smaller than 10 mmBtu/hr for both rules, we do not agree that completely exempting these units from the rule is appropriate. NESCAUM recommends that EPA put in place a work practice standard that requires existing sources to reduce their HAP emissions to the greatest extent possible. Without such requirements, existing units will continue to operate well into the future via life extension projects. We therefore recommend that EPA, in addition to requiring energy assessments and annual tune-ups, require existing facilities to either comply with emission limits for larger units or require fuel switching to the cleanest fuel type. For instance, existing oil-fired units should use the cleanest fuel in their class; biomass-fired units without advanced emission controls such as baghouses or ESPs should use clean, debarked wood. There is sufficient data that indicate fuel switching within a fuel type, be it oil, coal, or biomass, will reduce emissions of EPA's target pollutants.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: Matthew Todd and David Friedman

Commenter Affiliation: American Petroleum Institute (API) and National Petrochemical and Refiners Association (NPRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2025.1

Comment Excerpt Number: 29

Comment: We do not believe the proposal for liquid-fired boilers meets the requirements of CAA §112(d)(2) or correctly represents MACT. We also understand the problems associated with measuring low levels of CO and POM in stacks, particularly small stacks and the limitations of measurement methods and believe it would be essentially impossible the proposed emission limits to be monitored well enough to be enforceable.. Thus, we believe the conditions for a work practice standard specified in §112(h) would be met for area source liquid-fired boilers, even under MACT. We recommend that a tune-up standard, similar to that proposed for smaller liquid-fired boilers, and modified as we recommend below, is MACT and GACT for all area source oil-fired boilers.

Response: See response to comment EPA-HQ-OAR-2006-0790-0414.1, excerpt 8 for discussion of 112(h) technical and economic limitations.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 42

Comment: We recommend EPA consider would adopting management or work practice controls immediately under the GACT provisions. As determined necessary and appropriate, EPA could later consider revising the GACT standard to possibly include numeric emissions limitations.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: Katherine Fry

Commenter Affiliation: SierraPine Composite Solutions

Document Control Number: EPA-HQ-OAR-2006-0790-2272

Comment Excerpt Number: 5

Comment: Additional Size Categories Needed — Threshold Should Be 30 MMBTU/hr. Additional size subcategories are needed since boiler capacity has a large impact in real world operation. An initial consideration for size categories could be to depend on the size classifications established for boilers under the New Source Performance Standards (NSPS). Regarding the size sub-categorization decision in the proposal, EPA asked commenters, "We are specifically requesting comment on whether a threshold higher than 10 MMBTU/hr. meets the technical and economic limitations as specified in section 112(h)." We believe that the technical considerations used to set the NSPS subpart D(c) limits at 30 MMBTU/hr. are more than adequate to justify extending the threshold to that capacity level. There is a strong economic argument to this extension as well. Many small businesses specifically avoided boilers that triggered NSPS thresholds in the past because they could not afford the extra expense of NSPS requirements. Many of these boilers were, nonetheless, above 10 MMBTU/hr. Thus, expanding the threshold to 30 MMBTU/hour would proportionately benefit small business operations. It is our recommendation that this subcategory be modified and that the threshold be moved from 10 to 30 MMBTU/hour for oil and wood fired boilers to reflect the thresholds in the NSPS.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: Edward J. Wilusz

Commenter Affiliation: Wisconsin Paper Council

Document Control Number: EPA-HQ-OAR-2006-0790-2133

Comment Excerpt Number: 12

Comment: We support the proposed approach to regulating boilers in the “Gas 1” subcategory. Instead of prescribing numeric HAP emissions limitations on boilers burning clean gas fuels (the “Gas 1” subcategory), EPA proposes to adopt work practices requiring an annual tune up of the boiler. For units larger than 100 mmBtu/hr, EPA explains that “the capital costs estimated for installing controls on these boilers and process heaters to comply with MACT limits for the five HAP groups is over \$14 billion.” EPA further explains that:

[T]he need to employ the same emission control system as needed for the other fuel types would have the negative benefit of providing a disincentive for switching to gas as a control technique (and a pollution prevention technique) for boilers and process heaters in the other fuel subcategories. In addition, emission limits on gas-fired boilers and process heaters may have the negative benefit of providing an incentive for a facility to switch from gas (considered a “clean” fuel) to a “dirtier” but cheaper fuel (i.e., coal). It would be inconsistent with the emissions reductions goals of the CAA, and of section 112 in particular, to adopt requirements that would result in an overall increase in HAP emissions.

In short, EPA proposes that work practice standards are appropriate and justified for units in the Gas 1 subcategory out of concern for the cost of complying with numeric emissions limitations and based on the adverse policy incentives that would be created. We agree with EPA’s assessment of the Gas 1 subcategory and support the proposed work practices.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: Jim Simon

Commenter Affiliation: American Sugar Cane League

Document Control Number: EPA-HQ-OAR-2006-0790-2281.1

Comment Excerpt Number: 22

Comment: Work Practice Standard Is Appropriate for Bagasse-Fired Boilers.

EPA specifically invited comment on whether the technical and economic limitations of CAA 112(h) apply to boilers with a heat input capacity greater than 10 MMBTU/hour. 75 Fed. Reg. 31906 (June 4, 2010). As demonstrated herein, the application of the emission standards to bagasse-fired boilers is “...not practicable due to technological and economic limitations.” CAA §112(h)(2)(B). Therefore work standards would be more reasonable than the emission standards in the Proposed Rule.

In the preamble to the Proposed Rule, EPA provides two reasons why it allowed the use of a work practice instead of an emission standard for boilers with less than a heat input capacity of 10 MMBTU/hour. First, the stack diameters on these smaller boilers were usually less than twelve inches, making the standard tests difficult. Second, the annual costs for testing and

monitoring would have a significant adverse economic impact on the facilities using the smaller boilers.

There are technical reasons supporting the implementation of a work practice standard. Stacks associated with these boilers are old (due to the long history of sugar mills' operation in Louisiana) and many are very tall. Safety risks are obvious when testing personnel access the tops of these stacks to perform tests. Catwalks, scaffolding, or platforms are difficult to construct and are inherently unsafe given the physical layout of the mills.

Economic reasons also support the implementation of a work practice standard. EPA's Cost to Sales Analysis concluded that the compliance costs exceeds 3% of the average firm revenues for 79% of the facilities. 75 Fed. Reg. 31906 (June 4, 2010). This fact led EPA to conclude that "annual costs for testing and monitoring alone would have a significant adverse economic impact on these facilities." 75 Fed. Reg. 31906 (June 4, 2010). While 3% of sales seems to be EPA's threshold for what constitutes "significant," even smaller percentages can be significant to the individual company or industry.

EPA has estimated that the "compliance costs of each source would total \$50,000 per year for both new and existing solid- and liquid fired boilers." Cost-to-Sales Analysis of Testing and Monitoring Costs, June 7, 2007, Doc. No. EPA-HQ-OAR-2006-0790-0065. As stated elsewhere in these comments, the cost of compliance for each bagasse-fired boiler operating in Louisiana is expected be considerably higher than the per-source average estimated by EPA.

A reasonable estimate of the cost to Louisiana mills is between \$192 - \$282.5 million. These figures include about \$1,000,000 for each of the 71 operating boilers to install refractory walls and additional controls; \$10,000,000 to \$13,000,000 per new 200,000 - 300,000 pound/hour boiler required to offset decreased steam production; \$750,000 per boiler to install additional NOx controls to offset the expected increase in NOx emissions as a result a operating boilers to meet the CO standards; and \$1,200,000 per boiler to install and operate ESPs for additional PM control.

Significantly, bagasse-fired boilers in Louisiana are already subject to an enforceable work practice standard that assures proper operation and maintenance. The Louisiana Department of Environmental Quality's Sugar Mill Boiler Testing Policy (March 17, 2010) mandates that each boiler be subject to annual repair and maintenance plans and schedules. These plans and schedules are being written, implemented, and included in Title V permits.

Given the technological and economic limitations applicable to bagasse-fired boilers, EPA should allow the use of work practice standards.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: Barry Christensen

Commenter Affiliation: Occidental Chemical Corp

Document Control Number: EPA-HQ-OAR-2006-0790-2227.1

Comment Excerpt Number: 2

Comment: OCC supports work practice requirements for small boilers. Currently OCC has one boiler at an area source facility with a heat input capacity of less than 10 MMBtu/hr. OCC agrees that it is not feasible to test these small boilers and therefore supports the proposed work practice standard (biennial tune-ups in accordance with 63.11222) for these small boilers.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: W. Allan Cagnoli

Commenter Affiliation: Hearth, Patio, and Barbecue Association

Document Control Number: EPA-HQ-OAR-2006-0790-1900.1

Comment Excerpt Number: 3

Comment: For the area source boilers of central concern to HPBA, i.e., biomass boilers with design capacity less than 10 mmBtu/hr, especially those less than 1 mmBtu/hr, EPA proposed numerical standards for new ones of 100 ppm and 0.03 lb/mmBtu for CO and PM respectively and a tune-up standard for existing ones.

III. Key Legal Requirements EPA Must Satisfy

Two requirements of section 112(d) that EPA must satisfy deserve emphasis —i.e., the requirements that each MACT standard must be rational and in general technologically achievable.

A. Rationality

In making the determinations required by section 112(d), e.g., determinations as to the emission rates which represent the technological "floor" for new or existing units, EPA must satisfy basic requirements of rational decision-making. Congress explicitly consigned to the federal courts of appeals, and in particular the D.C. Circuit in the case of section 112(d) standards, the job of reviewing EPA's final actions upon petition and overturning them for failure to satisfy those rationality requirements. See CAA section 307(d)((9), 42 U.S.C. section 7607(d)(9). Thus, rationality principles constitute a fundamental underpinning of section 112(d), notwithstanding the formulaic nature of section 112(d)(3). To survive judicial review, a MACT standard must be based demonstrably on rational decision-making.

In reviewing EPA's actions under the CAA generally, the D.C. Circuit has firmly embraced that interpretation of the Act in many opinions. A much-quoted passage is the following one:

We will not set aside a final rule under the Clean Air Act unless the underlying agency action was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law" or "in excess of statutory jurisdiction, authority, or limitations, or short of statutory right." 42 U.S.C. section 7607(d)(9)(A) & (C). The "arbitrary and capricious" standard deems the agency action presumptively valid provided the action meets a minimum rationality standard. See, e.g., *Small Refiner*

Lead Phase Down Task Force v. EPA, 227 U.S. App. D.C. 201, 705 F.2d 506, 520-21 (D.C. Cir. 1983). In applying this standard we determine whether the agency has considered the relevant factors and articulated a rational connection between the facts and its choices. See *Motor Vehicle Mfrs. Ass'n of the United States v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43, 77 L. Ed. 2d 443, 103 S. Ct. 2856 (1983). While we carefully review the factual record, we will give due deference to the agency especially when the agency action involves evaluating complex scientific or statistical data within the agency's expertise. See *Ethyl Corp. v. EPA*, 176 U.S. App. D.C. 373, 541 F.2d 1, 34-36 (D.C. Cir. 1976) (en banc).

NRDC v. EPA, 194 F.3d 130, 136 (D.C. Cir. 1999) (emphasis added in bold). In a case arising under section 112(d), then Judge Roberts, now Chief Justice of the U.S. Supreme Court, quoted with approval the sentence highlighted in bold print in the above quotation, clearly intending to apply the rationality principle to the MACT standards at issue in that particular case. See *Sierra Club v. EPA*, 353 F.3d 976, 978 (D.C. Cir. 2004).

Indeed, in leading cases involving section 112(d), or its mirror-image counterpart, section 129(a)(2), 42 U.S.C. section 7429(a)(2), the D.C. Circuit has upheld, elaborated on and applied the rationality principle repeatedly. A prime example is *Cement Kiln Recycling Coalition v. EPA*, 255 F.3d 855 (2001), where the court stated:

In *Sierra Club*, we held that CAA section [129(a)(2)] requires EPA to make a reasonable estimate of the performance of the top 12 percent of units. While acknowledging that EPA has authority to devise the means of deriving this estimate, we made clear that the method EPA selects must allow a reasonable inference as to the performance of the top 12 percent of units. We emphasized that EPA must show not only that it believes its methodology provides an accurate picture of the relevant sources' actual performance, but also why its methodology yields the required estimate.... In *National Lime II*, we addressed a *Sierra Club* petition challenging emission standards set under section [112(d)] for non-hazardous waste-burning Portland cement kilns. In evaluating EPA's standards, we reiterated *Sierra Club*'s central holding that to comply with the statute, EPA's method of setting emission floors must reasonably estimate the performance of the relevant best performing plants.

Id. at 861-62 (emphasis added in bold; citations and quotation marks omitted). In the court's view, a "floor" determination is rational only if it accurately reflects actual performance.

Here, it would be the antithesis of rationality for EPA to base a section 112(d) determination on data that is unrepresentative of actual reality. Such data simply cannot depict actual performance accurately. That would be arbitrary and capricious, and the D.C. Circuit would strike down any MACT standard based on such a determination.

Response: The final rule does not require sources smaller than 10 MMBtu to meet a numerical emission limit for PM. For liquid-fired and biomass fired boilers, the standard is based on a GACT management practice, while for coal-fired sources, the standard is based a work practice under CAA section 112(h).

Commenter Name: Sheila C. Holman

Commenter Affiliation: North Carolina Department of Environment and Natural Resources

Document Control Number: EPA-HQ-OAR-2006-0790-2222.1

Comment Excerpt Number: 3

Comment: We agree with EPA that small boilers meet the technical and economic limitations as specified in CAA 112(h)(1). We also believe that a threshold higher than 10 MM Btu/hr would also meet the technical and economic limitations as specified in CAA 112 (h)(1) and reduce the significant adverse economic impact on facilities with small units. In this economy, many businesses are already on the verge of insolvency and would not be able to shoulder the compliance costs and continue to operate. EPA estimates annualized compliance cost of ~\$43,000 for coal-fired units. We recommend EPA use the available data, and collect more data if necessary, to further evaluate the technical feasibility and economic impacts for boilers in a classification up to 30 MM Btu/hr. This suggestion is further supported by another consideration, namely the questionable emission measurement methodology for small boiler ducts.

EPA should extend its threshold of 10 MM Btu/hr up to 30 MM Btu/hr for proposing a work practice standard under the CAA Section 112(h) requiring an annual tune-up for existing boilers and process heaters combusting conventional fuels. The basis of this position is that:

1. Small units produce proportionally less HAP emissions than larger units.
2. The value of the money spent for compliance for small units (<30 MM Btu/hr) would be better utilized in reducing emissions in other applications.
3. There is a limited capacity of the air pollution control and construction industries in the US to service the nearly 180,000 Boiler GACT affected facilities. This is in addition to the 13,555 units to be serviced under the MACT standards. It would be wise for EPA to assure that the most significant, larger facilities are serviceable first on a priority basis before severely regulating the small units.
4. Many small boilers are not currently equipped with the infrastructure (sampling ports, safe platform, stairway/steps, etc.) to accommodate valid emission measurements. Acquiring this infrastructure would cost \$40,000 to \$80,000 for each unit.
5. EPA's normal emission test equipment and methodology is not suitably designed, and consequently may produce questionable data, for small diameter stacks (< 2 feet). [Footnote: See 40 CFR Part 60, Appendix A, Method 1, Section 2.3.1.2 and Method 1A in total.] Merely enlarging the stack diameter would not necessarily produce valid data because of inherent

limitations with changes in gas velocity, gas temperature, pollutant concentration, and MDLs (page 31909).

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: Keith M. Krom

Commenter Affiliation: AT&T, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-2243

Comment Excerpt Number: 3

Comment: EPA should include 10 MMBtu size cutoff for new boilers

EPA is proposing to subject existing coal, biomass, and oil-fueled boilers with MMBtu heat input capacity at or above 10 million Btu/Hr to specific emission standards (e.g., 0.03 lb per MMBtu of heat input for particulate matter). While EPA is proposing that existing coal, biomass and oil-fueled boilers below 10 MMBtu/Hr be subject to work practice standards under CAA section 112(h), EPA is proposing that all new boilers, no matter what size, fuel type or utilization be subject to the same emission standards as existing boilers above 10 MMBtu/Hr. This disparate treatment is at odds with EPA's rationale for the 10 MMBtu/hr size cutoff for emission standards — as well as at variance with the real world utilization of small boilers.

In assessing the 10 MMBtu/hr size cutoff for emission standards for existing boilers, EPA analyzed total compliance costs of the standards relative to average firm revenues of the facilities. EPA determined that costs for testing and monitoring would have a significant adverse economic impact on the facilities. EPA also determined that technological options for controlling emissions from area source boilers (e.g., multiclones, fabric filters) were not available or achievable for certain boilers and that standard methods for measuring emissions of mercury "are not applicable for sampling small diameter stacks." EPA, however, indicated that new facilities have "added flexibility of including compliance costs into their design and planning as well as "the option of fuel selection in minimizing their compliance costs."

In such assessments, EPA has made an overly broad conclusion both as to the availability and feasibility of control technology and the accessibility of fuels. It is simply not true that any company or facility has a free choice as to how to fuel its boilers in all areas. The availability of natural gas is constrained by location as well as the feasibility of using other fuels. That control technology may be supportable for relatively large area sources moreover does not establish that the same technology can be applied to relatively small area sources. Data compiled for this rulemaking and the MACT floor methodology simply cannot support a broad conclusion that all new facilities are somehow able to comply with standards that are not feasible or available for all existing facilities.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: W. Allan Cagnoli

Commenter Affiliation: Hearth, Patio, and Barbecue Association

Document Control Number: EPA-HQ-OAR-2006-0790-1900.1

Comment Excerpt Number: 4

Comment: HPBA respectfully urges EPA to adhere to its 2004 position. The evidence of congressional intent strongly and unequivocally shows that Congress intended the regulatory machinery of sections 112(d)(1)-(3) to operate so as to: (1) identify those forms of emission control in actual use which produce maximum reductions in HAP emissions when applied to particular units; (2) press all existing and new units of the same type from the standpoint of basic production design to apply those controls or otherwise achieve at least the same reduced level of emissions, either through innovation, reduced operation or some other way; and (3) preserve, protect and enhance the economic vitality of the national economy. Thus, in line with other key provisions of the Clean Air

Act, such as section 111, sections 112(d)(1)-(3) are designed to propagate the best HAP emissions control in actual usage, not to produce dictates achievable only through widespread shutdowns and installation only of fundamentally re-designed production equipment.

To implement that congressional purpose, EPA must base the floors not only on available emissions test data, but also on a determination that some technically feasible means of achieving the floor is generally available to the units within the subcategory, as demonstrated by actual use within the subcategory. Otherwise, if EPA were to base the floors for a particular subcategory only on available test data, without examining technical feasibility and actual usage, it could produce a MACT standard which a majority — indeed even a plurality — of units in the subcategory would have no hope of achieving. That would be a perversion of the congressional vision — which is to identify and spread the use of best controls, while preserving economic vitality, not to force widespread shutdowns, re-capitalization within industry segments, and the sacrifice of useful fundamental design in planning new production equipment.

Section 112 is replete with unassailable textual evidence that Congress authorized EPA to set a floor only at a level which units within a subcategory generally had some means of achieving as a technical matter, as demonstrated by actual usage within the subcategory. In implementing section 112, EPA must give full effect to that textual evidence. See *Whitman v. American Trucking Association, Inc.*, 531 U.S. 457, 485 (2001) ("The EPA may not construe the statute in a way that completely nullifies textually applicable provisions meant to limit its discretion.").

Key pieces of such evidence are as follows:

Section 112(d)(2), the overarching directive to EPA for establishing a MACT standard for any given subcategory, requires EPA to set the standard at a level that corresponds to the maximum degree of reduction of HAP emissions that is achievable for the subcategory through the "application of measures, processes, methods, systems, or techniques". (Emphasis added.) Sections 112(d)(2)(A)-(E) then define those various forms of emissions control as including a wide range of "measures". Specifically listed are process changes, materials substitution, enclosures, add-on control technology, work practices, and operational standards. Not listed, or

even suggested, were changes to the basic design of the units in question, the HAP-emitting production equipment. In crafting the MACT standard setting process, Congress took production equipment, such as boilers and process heaters, as a given and envisioned that the standards EPA generated would stimulate the "application" of control "measures" to the production equipment, without change to the basic design of the equipment. In other words, section 112(d)(2) evidences a fundamental mindset on the part of Congress, namely: Congress sought to control HAP emissions by forcing investments only in control measures. It did not seek to control HAP emissions by dictating or restricting basic designs of production equipment. Congress left individual companies free to make fundamental decisions about their core capital investments, especially the basic design of production equipment. Section 112(d)(2) thus reflects and reveals a fundamental conceptual orientation on the part of Congress which is universal to all of the technology-based standard-setting processes dictated by the CAA.

Section 112(d)(3)(A) is also an expression of, and hence reveals, that mindset. It calls on EPA to set the floor for existing units within a subcategory at the average level actually "achieved" by the best "performing" 12 percent. The use of the terms "achieved" and "performing" imply that Congress had in mind a cause-and-effect relationship between the actual in-use application of one or more of the control measures listed in section 112(d)(2)(A)-(E) to a piece of HAP-emitting equipment and a resulting actual level of reduced emissions from the equipment. The terms indicate that Congress distinguished between such measures and the fundamental design of the equipment and wanted to identify those measures by which EPA could reliably establish norms of behavior for pieces of equipment of like design. In other words, Congress sought to spread the use of those controls proven to be best by actual practice, but not force changes in the fundamental design of production equipment within an industry segment, e.g., through shutdowns and re-capitalization. If EPA, however, were to base the floor for existing units within a subcategory only on average emissions test data, without examining the cause-and-effect relationships, it could end up setting a floor which would operate to force changes in fundamental design of production equipment. That would be contrary to the textual thrust of section 112(d)(3)(A), especially in the light of the fundamental structure of section 112(d)(2), as EPA recognized in the first Boiler MACT rulemaking. In short, Congress authorized EPA to set behavioral norms only for the application of proven best controls to existing HAP-emitting equipment within an industry segment. It did not authorize EPA to set norms for the basic design of such equipment.

The first sentence of section 112(d)(3), which specifies the methodology EPA must follow to set a floor for new units, carries the same meaning. It provides: "The maximum degree of reduction in emissions that is deemed achievable for new sources in a category or subcategory shall not be less stringent than the emission control that is achieved in practice by the best controlled similar source" Once again, the phrases "reduction in emissions", "achieved in practice", and "best controlled" all bring to mind, especially in juxtaposition with section 112(d)(2), the application of control measures to HAP-emitting production equipment. The first sentence of section 112(d)(3) thus confirms that Congress regarded the basic design of such equipment as a given and sought to identify the forms of control that (i) experience showed to be the most effective and (ii) companies could apply in a replicable way without altering the basic design of the production equipment.

Section 112(d)(6) also reflects this mindset. It requires EPA to "review, and revise as necessary (taking into account developments in practices, processes, and control technologies), emission standards promulgated under this section no less often than every 8 years." The reference to "practices, processes, and control technologies" indicates what Congress regarded as factors of significance in setting behavioral norms for controlling HAP emissions. In the light of section 112(d)(2)(A)-(E), those factors are limited to means of control applicable to an already established basic design of the relevant piece of productive equipment. Section 112(d)(6) thus confirms that Congress did not intend to authorize section 112(d) standards that could constrain the choice of such basic design.

Other provisions of the CAA provide further evidence of Congress' intent. First, several provisions other than section 112 call for the establishment of technology-based emission standards for stationary sources, namely: section 111 (New Source Performance Standards (NSPS)), section 129 (incinerators), section 165 (Best Available Control Technology (BACT) for certain new construction projects), section 172(c)(1) (Reasonably Available Control Technology (RACT) for existing sources as control by State Implementation Plans), and section 173 (Lowest Achievable Emission Rate (LAER) for certain new construction projects). In each case, the basic idea is to set a behavioral norm based on the application of available and "demonstrated" control technology, without fundamentally compromising the freedom of companies to choose the basic design of their production equipment. There is no sign in the CAA that Congress intended section 112(d) to operate differently or to authorize EPA to encroach fundamentally on that basic freedom in setting MACT standards. Second, section 101(b)(1) declares that an overarching purpose of the entire CAA is "to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." (Emphasis added.) If EPA were to set floors under section 112 solely on the basis of emission rates, without regard to the cause-and-effect relationship between available proven controls and such rates, inevitably it would defeat that purpose by severely compromising the Nation's productive capacity.

The legislative history of section 112 confirms that Congress was aiming to identify and spread best, in-use-proven controls of HAP emissions within the appropriate categories and subcategories of HAP-emitting equipment, without fundamentally constraining the ability of companies to choose the basic design of that equipment. During the Senate debates on the conference bill that became the CAA Amendments of 1990, Senator Durenberger, the primary author of section 112, stated: "For each category of sources, EPA will promulgate a standard which requires the installation of maximum achievable control technology (MACT) by the sources in the category." [Committee on Environment and Public Works, U.S. Senate, Legislative History of the Clean Air Act Amendments of 1990, S. Prt. 103-38, at 863 (Nov. 1993).] Later in the same debates, Senator Chafee, one of the managers of the legislation, echoed Senator Durenberger's description. [Id. at 951] Still later, Senator Baucus, another manager of the legislation, stated:

Mr. President, the MACT requirement is the cornerstone of this approach. It means that the source may need to install a scrubber, selective catalytic reduction, adjust the combustion temperature of its equipment, substitute materials or apply other methods to reduce air emissions. [Id. at 1029]

Plainly, in their mind, section 112(d)(1)-(3) would cause companies to take action only to apply controls to an established equipment design, as opposed to cause changes in such design. If EPA were to set the floors solely on the basis of emissions test data, without examining the technical reasons for the actual emission level, it could end up setting a standard that a company could achieve only by mixtures of shutdowns and shifts in basic design of production equipment, as opposed to the application of control measures. Thus, EPA would fail to keep faith with the intent of Congress.

Finally, no court decision has addressed squarely whether EPA may set a floor solely on the basis of emissions test data, without regard to the existence of a proven means of achieving the floor. The D.C. Circuit in the Brick MACT case, *Sierra Club v. EPA*, 479 F.3d 875 (2007), did not address that issue squarely. As characterized by EPA in the June 2010 proposal, the closest the court came to addressing that issue was to rule that "[M]oors for existing sources must reflect the average emission limitation achieved by the best-performing 12 percent of existing sources, not levels EPA considers to be achievable by all sources." 75 Fed. Reg. at 32009-10 (emphasis added). That is a different issue. A individual source within a particular subcategory may not be able to achieve a floor because of cost, even if a proven means of control is available to it from a technological standpoint.

As shown above, Congress did not authorize EPA to set a floor on the basis of emissions test data, without also determining that there are technologically feasible means of achieving that floor which actual usage within the subcategory has shown are available to all of the units in the subcategory given their particular basic design. If EPA were to determine that there are no such means of control across the subcategory, it would have to subcategorize further in order to group units of like design or, if that were not practicable, base the ultimate standard on a universally applicable a work practice, such as tune-ups. HPBA respectfully urges EPA to retain its 2004 interpretation to the same effect.

With respect to EPA's proposals on area source boilers, HPBA on behalf of the OHH Caucus is concerned primarily with EPA's proposed treatment of biomass boilers with design capacity below 10 mmBtu/hr, especially those biomass units below 1 mmBtu/hr.

HPBA strongly supports EPA's proposal to set a tune-up standard, as opposed to a numerical standard, for emissions of CO and PM from existing units with design capacity below 10 mmBtu/hr. First, EPA is correct in concluding that: (1) its emissions measurement methodologies for CO and PM generally are not applicable and effective for biomass boilers below that level, and (2) the cost of emissions testing and monitoring for CO and PM for such small units is prohibitive. See 75 Fed. Reg. at 31906 cols. 2-3.

Second, in the view of HPBA, EPA has no rational basis in any event for concluding that the emission data EPA has for CO and PM, largely collected from biomass units above 10 mmBtu/hr, are representative of biomass units below that level. The fundamental designs of biomass boilers below that level vary greatly within that group and from biomass boilers above it. For example, as described in more detail below, biomass boilers below 1 mmBtu/hr are starkly different from biomass boilers above 10 mmBtu/hr — e.g., in the nature of the fuel feeding

systems, in that many biomass boilers below 1 mmBtu/hr are fed by hand. In addition, EPA has no emissions data in the present record from any biomass boiler below 1 mmBtu.

Finally, it is widely recognized that tune-ups generally are the most practical choice for control of PM emissions from biomass boilers below 10 mmBtu/hr generally and especially biomass boilers below 1 mmBtu/hr. See, e.g., 75 Fed. Reg. at 31908 cols. 1-2. EPA acknowledged in its Federal Register notice (*id.*) and its technical support document for its area source boiler proposal (TSD) that tune-ups are generally more effective than multiclones.⁶ [A. Singleton, ERG, MACT Floor Analysis for the Industrial, Commercial, Institutional Boilers, National Emission Standards for Hazardous Air Pollutants —Area Sources, at unnumbered page 12 (April 2010) (EPA-HQ-OAR-2006-0790-0049) (herein, the "TSD").] Dry electrostatic precipitators (ESPs) and fabric filters (FF) are seen as prohibitively expensive for small boilers.⁷ [See, e.g., RSG Inc., Emission Controls for Small Wood-Fired Boilers, at sections 5.2 and 5.3, pp. 18-19 (Feb. 2010) (Docket ID No. EPA-HQ-OAR-2006-0790-0048).] This is especially so for biomass boilers under 1 mmBtu/hr, where the cost of an ESP or FF system almost certainly would exceed the cost of boiler installation, which installation is typically on the order of \$1520,000. Moreover, as of early this year, there was no demonstrated application of an ESP on a small wood boiler in the United States. [*Id.*, at section 5.2, p. 18.]. And FF systems for biomass boilers under 10 mmBtu/hr are seen as presenting major risks of fire and clogging, for which the sort of facility, such as a small school, that would install such a boiler would be very ill-equipped to manage.[See, e.g., *id.* at section 5.3, p. 18.]

HPBA also supports EPA's proposal to defer any action on possible mercury emissions from biomass boilers at this time. In particular, EPA lacks any rational basis for making a MACT/GACT decision on mercury emissions from new or existing area source biomass boilers with design capacity less than 10 mmBtu/hr, especially those below 1 mmBtu/hr. EPA has no meaningful data at all to support such a decision.

HPBA, however, strongly objects to EPA's proposal to set numerical standards of 100 ppm and 0.03 lb/mmBtu for CO and PM respectively for new area source biomass boilers with design capacity of less than 10 mmBtu/hr, especially those less than 1 mmBtu/hr. As explained below, EPA lacks any rational basis for setting those standards, yet the standards would needlessly destroy the market for a very large percentage of models of small biomass boilers, all of which have important economic usefulness, especially in the drive to substitute renewable fuels for fossil fuels, all contrary to the fundamental requirements of rationality and achievability which underpin section 112(d). HPBA urges EPA to abandon any effort to set a numerical standard for such boilers, especially those with design capacity less than 1 mmBtu/hr, and at most to set a tune-up standard for boilers below 10 mmBtu/hr.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: Kevin P. Bundy

Commenter Affiliation: Center for Biological Diversity

Document Control Number: EPA-HQ-OAR-2006-0790-2009.1

Comment Excerpt Number: 5

Comment: By the same token, EPA should reject industry arguments that workpractices or other alternative standards should be adopted for biomass facilities in place of MACT. There has been no demonstration that MACT is not feasible for these facilities within the meaning of section 112(h)(2).

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: Eric Trauner

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2286

Comment Excerpt Number: 5

Comment: We agree with those who comment that work-practice standards would be adequate for smaller liquid/ solid fuel boilers, both existing and new. With this in mind, the applicability for emission limits for this MACT should be set at 20 MMBTU per hour, for both new and existing sources and for all fuels. And to be clear, that level of applicability should be based not on nameplate rating but on fuel throughput x BTU per unit measure, with the final applicability set at 175,000 MBTUs combusted per year (20 MMBTU per hour x 8760 hours per calendar year). Coal/ oil/ biomass (etc) units that are committed to burning <175,000 MMBTUs per year would implement work practice standards.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: John Lyons

Commenter Affiliation: Kentucky Division for Air Quality

Document Control Number: EPA-HQ-OAR-2006-0790-2218.1

Comment Excerpt Number: 7

Comment: 40 CFR 63.11215(a), requires work practice standards for units less than 10 MMBtu/hr. We suggest that a lower limit of 1.0 MMBtu/hr be included as a cut-off for the requirements of 40 CFR 63.11215(a).

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: Mary L. Frontczak

Commenter Affiliation: Peabody Energy

Document Control Number: EPA-HQ-OAR-2006-0790-2163.1

Comment Excerpt Number: 8

Comment: In attempting to justify not prescribing MACT standards for natural gas-fueled boilers because of the cost, EPA states that it would cost owners of gas-fueled boilers more than \$14 billion in capital costs to install emission controls and maintains that this cost “is higher than the estimated combined capital cost for boilers and process heaters in all of the other subcategories. This appears to be misleading, as the number of affected gas-fueled units (11,352) is also much greater than the combined number of affected units in other subcategories (2,023).

Considered on a per-unit basis, the \$14 billion cost spread over 11,532 gas-fueled units would be \$1.21 million. In comparison, the annualized \$4.468 billion cost of compliance for coal-fueled boilers will be borne by only 578 units, at an average cost of \$7.73 million each. Even considering EPA’s stated final annualized cost to coal-fueled units, after taking into account fuel savings, of \$1.619 billion, the cost of compliance for coal-fueled units still averages out to \$2.80 million per unit. This stands in stark contrast to the costs imposed by EPA’s proposed work practice standard, which would require gas-fueled boilers industry-wide to invest capital costs of only \$75 million. When taking into account EPA’s stated fuel savings, gas-fueled boilers would derive cumulative savings of \$260 million from application of the EPA work practice standards, in contrast to the \$1.619 billion cost borne by coal-fueled boilers.

In other words, even if cost considerations were relevant in a MACT floor analysis, which they are not, it is not true that the cost of compliance for gas units with MACT standards would be extraordinarily expensive as compared with the cost of compliance for coal units. To the contrary, on a per unit basis, the cost of MACT standards for gas units is lower than the cost for coal units.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: W. Allan Cagnoli

Commenter Affiliation: Hearth, Patio, and Barbecue Association

Document Control Number: EPA-HQ-OAR-2006-0790-1900.1

Comment Excerpt Number: 8

Comment: EPA proposed that existing biomass boilers below 10 mmBtu/hour in size should not be subject to a numerical emission standard and the associated compliance testing and monitoring because "testing and monitoring alone would have a significant adverse economic impact on these facilities," as high as 19 percent of business gross revenues, according to EPA. Since the annual costs of emissions testing and the amortized capital cost and maintenance of a CEM are fixed costs for a boiler regardless of size, it is obvious that such costs as a percentage of any measure such as firm revenues or boiler capital cost, would be many times higher for Very

Small Boilers than for those below 10 mmBtu/hour in size. Even so, EPA makes the contradictory claim that new units "have the added flexibility of including compliance costs into their design and planning" while admitting such "planning" may simply involve fuel switching to natural gas in order to avoid the rule's requirements. See 75 Fed. Reg. at 31909. While a company would have the ability to plan in advance, that would make little or no difference because the cost of testing and monitoring would be extremely high relative to revenues or new boiler cost. In any event, EPA lacks authority to set a numerical standard that is generally unachievable for a given design.

In sum, the present record does not provide EPA with a rational basis for setting any numerical limit for CO or PM for area source biomass boilers with design capacity under 10 mmBtu/hr, especially those under 1 mmBtu/hr. Instead, since tune-ups are the only form of effective control discernible in the record for such boilers, EPA must set at most a work practice standard requiring tune-ups for them.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: Sheila C. Holman

Commenter Affiliation: North Carolina Department of Environment and Natural Resources

Document Control Number: EPA-HQ-OAR-2006-0790-2222.1

Comment Excerpt Number: 11

Comment: [See submittal for Attachment A, Topic 4 and 5, which discusses feasibility of 30 MMBtu/hr limit.]

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: Martin T. Booher

Commenter Affiliation: Ethan Allen Interiors, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1974.1

Comment Excerpt Number: 13

Comment: Ethan Allen is concerned that achievement of the proposed limits will not be technically feasible or economically reasonable, especially for older boilers, making inappropriate any "beyond-the-floor" controls. See 42 U.S.C. § 7412(d)(2) (requiring EPA to consider the cost of achieving emissions reductions, among other things). For instance, CO emissions monitored from an Ethan Allen facility likely would exceed EPA's proposed limits. However, Ethan Allen's boilers are in compliance with the boiler efficiency calculation imposed by the State in which the boiler is operating. These results illustrate a key flaw in EPA's decision to use CO emissions as a proxy for efficiency. As discussed below, CO emissions may provide a

valid efficiency measure for fossil fuel-fired boilers, but are not suited for assessing the efficiency of biomass-fired boilers. As a result, if EPA decides to set CO limits at 160 ppm, there will be no way for Ethan Allen to further reduce CO emissions and its only option will be to replace its boilers or, if technically feasible, switch to natural gas.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: Martin T. Booher

Commenter Affiliation: Ethan Allen Interiors, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1974.1

Comment Excerpt Number: 16

Comment: Ethan Allen is concerned the EPA has not fully assessed the costs that will have to be incurred to comply with the regulation. Extensive fuel and parameter monitoring equipment likely will be needed to manage combustion in order to meet the proposed CO limits. These would include costs for new fuel feed systems, new controllers and new equipment to control moisture content of fuel. Ethan Allen estimates that the cost of new control equipment alone would cost well in excess of \$250,000 per boiler per location. If a new silo and unloaders were required, single systems would cost in excess of \$150,000. And further, multiple silos would be needed for each location. It also should be noted that there would be no guarantee that Ethan Allen's boiler could meet the proposed CO limit despite these significant capital expenditures. In fact, Ethan Allen, after consultation with boiler vendors, has concluded that there are no new biomass-fired boilers (and related systems) that are guaranteed to meet the EPA's proposed CO standard.

In addition, EPA incorrectly assumes that boilers above the 10 MMBtu/hr limit can even meet the established CO limit and therefore does not take into account the added cost of boiler replacement or fuel switching necessary where boilers are otherwise unable to comply. As a result, EPA should conduct an additional analysis using updated figures and other economic data to determine whether a threshold higher than 10 MMBtu/hr meets the technical and economic limitations as specified in CAA § 112(h). Ethan Allen believes that a more reasonable standard would include units smaller than 60 MMBtu in size, similar to the approach taken by New Jersey. See 75 Fed. Reg. at 31,906.

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Commenter Name: W. Allan Cagnoli

Commenter Affiliation: Hearth, Patio, and Barbecue Association

Document Control Number: EPA-HQ-OAR-2006-0790-1900.1

Comment Excerpt Number: 1

Comment: HPBA on behalf of the OHH Caucus strongly supports EPA's proposal to set a work practice standard (i.e., tune-ups), instead of numerical standards, for emissions of CO and PM from existing area source biomass boilers with design capacity below 10 mmBtu/hr, especially biomass boilers below 1 mmBtu/hr. EPA has no evidence that the CO and PM emissions data it has for biomass boilers are representative of units below 10 mmBtu/hr, especially units below 1 mmBtu/hr, the units of greatest concern to the OHH Caucus. At the same time, EPA does have evidence that: (1) the fundamental designs of biomass boilers, including fuel usage, vary greatly, especially as between biomass boilers over 10 mmBtu/hr and those below 1 mmBtu/hr; (2) EPA's emissions measurement methodology is not applicable to biomass boilers below 10 mmBtu/hr, especially those below 1 mmBtu/hr; (3) add-on control technology and emissions testing and monitoring are prohibitively expensive for such boilers; and (4) tune-ups are demonstrated to be effective in reducing CO and PM emissions from such boilers. EPA's proposal as to existing units below 10 mmBtu/hr satisfies the rationality and achievability requirements of section 112(d).

Response: See response to comment EPA-HQ-OAR-2006-0790-1900.1, excerpt 3 for discussion of 112(h) technical and economic limitations.

Legal/Applicability: Secondary Materials or Waste-Burning Boilers (exempt from 129)

Commenter Name: Ted Kniesche

Commenter Affiliation: Fulcrum Bioenergy Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1779.1

Comment Excerpt Number: 1

Comment: Fulcrum is providing these comments agreeing with EPA's applicability thresholds for the proposed rule. Fulcrum agrees that its syngas—having been processed to remove contaminants—is not a solid waste, and its subsequent combustion is not subject to Section 129 of the Clean Air Act. See 75 Fed. Reg. 31,878 (2010) ("In the [gasification] examples above, we view the non-hazardous secondary materials to have been sufficiently processed to produce a fuel product that would not be a solid waste . . ."). Having therefore been excluded from the Section 129 proposed rule, see generally 75 Fed. Reg. 31,938 (2010), Fulcrum also agrees that EPA has properly excluded certain waste heat recovery boilers, see 75 Fed. Reg. at 31,930 ("Waste heat boilers are excluded from this definition [of "boiler"]."), and gas-fired boilers, see id at 31,925 ("The types of boilers listed in paragraphs (a) through (e) of this section are not subject to this subpart. * * (e) A gas-fired boiler as defined in this subpart."), from applicability under the Boiler MACT area source proposed rule, and respectfully requests that EPA retain these applicability exclusions in the final rule.

Response: See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 10 for discussion of secondary materials or waste burning boilers.

Commenter Name: N/A

Commenter Affiliation: Sierra Club, Earth Justice, Clean Air Task Force, Natural Resources Defense Council

Document Control Number: EPA-HQ-OAR-2006-0790-1982.1

Comment Excerpt Number: 10

Comment: EPA’S FAILURE TO SET STANDARDS FOR AREA SOURCE BOILERS THAT BURN SECONDARY MATERIALS IS UNLAWFUL AND ARBITRARY.

As noted above, EPA denies that any area source boilers burn any secondary materials whether those materials are classified as waste or not. But whether EPA believes that area source boilers are burning secondary materials or not, the agency has provide no record basis for that belief, and the record strongly indicates that area source boilers are burning secondary materials. If EPA moves forward with its current proposal to define of non-hazardous solid waste that excludes the vast majority of secondary materials burned for energy recovery, the agency will have effectively exempted many boilers from any regulation at all. Boilers burning secondary materials that do not fit within EPA’s regulatory definition of solid waste will not be regulated as incinerators under § 129 because the agency will have labeled the secondary materials they burn a non-waste. And they will not be regulated as area source boilers under § 112 because EPA – choosing to pretend that no area source burns any secondary material – has not issued any standards for such sources.

It is possible that some boilers burning secondary materials will be swept into EPA’s categories for coal, oil, or biomass fired units. For example, if a boiler burns ten percent coal and secondary materials, it would be deemed a coal fired unit. But this still leaves a potentially enormous group of units unregulated: those burning only solid secondary materials or only secondary materials and gas. EPA’s apparent attempt to silently deregulate these units is unlawful and reprehensible. In reality these units are incinerators subject to emission standards under § 129. But even assuming arguendo that they are not incinerators, EPA has listed industrial boilers and commercial and institutional boilers as sources for which § 112 regulations are required, and those regulations are now long overdue. Thus, EPA must set § 112 standards for these units to meet its obligations under § 112 and the order in *Sierra Club v. EPA*, No 01- 1537 (D.D.C.) requiring EPA to “promulgate emission standards assuring that sources accounting for not less than ninety percent of the aggregate emissions of each of the hazardous air pollutants enumerated in Section 112(c)(6) are subject to emission standards under section 112(d)(2) or (d)(4) no later than December 16, 2010.”

More fundamentally, exempting units that burn secondary material from any emission standards will have real and significant adverse impacts on the communities that are forced to suffer from the uncontrolled toxic pollution they emit. Such deregulatory mischief is directly at odds with the stated goals of EPA, EPA’s Administrator, and President Obama to protect communities from toxic pollution.

Response: Some commenters took the reference to “coal-fired” and “oil-fired” boilers in the proposed rule to exclude boilers that burn non-hazardous secondary materials (NHSM). The final rule clarifies that area source boilers that burn NHSM are subject to these rules. We have adopted new terminology to reflect our intent at proposal to cover NHSM, and have explicitly defined “solid fossil fuel-fired” and “liquid-fired” to mention certain common NHSM.

We continue to believe that sources covered by the area source rule represent different industries than the major source boiler rule, therefore projections of the number of area sources burning NHSM that rely on the percentage of sources burning NHSM in the CAA 114 responses from major sources is methodologically dubious. Further, based on our understanding of the types of institutions and commercial entities that we project to be subject to this rule, we believe it is likely that only discrete subsets of these entities will generate on site and combust NHSM (e.g., used oil at service stations).

Commenter Name: Rich Raiders

Commenter Affiliation: Arkema Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1958.1

Comment Excerpt Number: 12

Comment: Major sources of HAP combusting secondary materials will be subject to the Boiler and Process Heater Maximum Achievable Control Technology (“MACT”) standard, proposed 40 CFR 63 Subpart BBBB. Area sources of HAP combusting secondary materials will be subject to the Boiler Generally Achievable Control Technology (“GACT”) standards, proposed 40 CFR 63 Subpart JJJJJ. These standards regulate emissions from a variety of regulated air pollutants emitted from combustion activities. Because the Boiler MACT regulates additional pollutants not covered in the Boiler GACT, EPA should consider requiring all owners and operators combusting secondary materials exempted from the definition of a solid waste in proposed 40 CFR 241.3(d) be regulated under the MACT, including area sources. By implementing this minor change to the Boiler GACT rule, EPA reduces HAP emission risks from less regulated Boiler GACT combustion units. Because the emissions control technologies minimizing HAP emissions risk will coincidentally control most criteria pollutant emissions, the Boiler MACT, substantially as proposed, is reasonably protective of human health and welfare for pollutants that would otherwise be controlled under CISWI. We comment further on Boiler MACT, Boiler GACT, and CISWI, the rules that regulate combustion of non-hazardous secondary materials, separately.

Response: See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 10 for discussion of secondary materials or waste burning boilers.

Commenter Name: Arthur N. Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management, NESCAUM

Document Control Number: EPA-HQ-OAR-2006-0790-2137.1

Comment Excerpt Number: 18

Comment: NESCAUM believes that EPA will need to create additional categories under section 112 in both the area and major source rules for facilities that combust secondary materials or use the section 129 exemption.

Response: See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 10 for discussion of secondary materials or waste burning boilers.

Commenter Name: Susan Forbes

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-1251

Comment Excerpt Number: 3

Comment: If finalized, this rule would permit more than 180,000 facilities nationwide to burn industrial wastes without any requirements to control, monitor, or report their emissions. And since the EPA made no effort to determine how many of these facilities may already be burning industrial waste, neighboring communities will be unable even to find out if waste burning is occurring nearby and if they are being exposed to toxic air pollution as a result.

Don't let big polluters trash our lungs. Please strengthen this rule to adequately protect our health from unregulated waste burning. The lives of many Americans literally depend on it. This is taking a huge step backwards in terms of keeping the air clean for everyone.

Response: See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 10 for discussion of secondary materials or waste burning boilers.

Other - Legal and Applicability Issues

Commenter Name: Carl Johnson

Commenter Affiliation: Southern Pressure Treaters' Association

Document Control Number: EPA-HQ-OAR-2006-0790-0870.1

Comment Excerpt Number: 1

Comment: On June 4, 2010 the Agency published four related rules. Due to the complexity of the four proposed rules, the volume of materials to be reviewed, the importance of a sufficient review by the stakeholders and the potential for a negative impact on industry, we recommend that the Agency ask the court for more time for proper rule development, public review and comment and final promulgation.

Proper rule development would be to finalize the non-hazardous solid waste definition rule first so the regulated entities would understand the impacts of the three combustion rules. Then the Agency could re-propose the three combustion rules based on the outcome of the non-hazardous solid waste definition rule.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Norman Bujold

Commenter Affiliation: Cleaver Brooks

Document Control Number: EPA-HQ-OAR-2006-0790-0392.1

Comment Excerpt Number: 1

Comment: We find that the determination of the area or major source classification is not clear. What is the source classification procedure? How will the information be accessed for combustion application proposals? How will the future plant expansion be taken into account?

Response: Section 63.11194(e) specifies that units that were initially major sources and installed a control device after November 15, 1990, and as a result became an area source, are subject to the area source rulemaking. EPA did not determine that further clarification was needed on this topic.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 4

Comment: We recommend EPA complete the definition of non-hazardous solid rule making first and then proceed with the promulgation of the other three rules.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 16

Comment: I'm just going to make two points: Number 1 – These proposals should exclude used motor oil; and, Number 2 -- Over-regulating used motor oil risks increasing harm to the environment.

Since at least 1992 the used oil recycling system has been guided by the comprehensive EPA regulations set out in 40 CFR Part 279. These rules were mandated by Congress in the 1980's, and they govern how used motor oil is collected by dealerships and other vehicle maintenance facilities and how it is subsequently managed, both on site and off site. Notably, Part 279 resulted from over 10 years of careful deliberation by EPA, a process which involved the studied examination of every aspect of used oil management, including its recycling as a fuel in burners and boilers. I began working on the development of these rules in the early 1980's as an EPA enforcement attorney and have been involved with their development and implementation ever since. I can assure you that every legitimate issue of concern was raised and resolved during those many years of rulemaking.

Consequently, I find it somewhat disconcerting to see EPA devoting precious Agency resources attempting to address used oil in the context of the area source NESHAP and waste identification proposals under consideration. When the proposals were recently issued, my first reaction was what am I missing. Could EPA have determined that used motor oil poses some newly-discovered risk to human health or the environment that calls for further regulation?

Well, the answer to that question is an unequivocal no. Moreover, the fine-tuned used-oil recycling system EPA helped to foster has never worked more effectively. Virtually all used oil collected at vehicle maintenance facilities is properly recycled, with do-it-yourselfer oil more than ever finding its way into the system. In addition, the used motor oil recycled today is significantly cleaner than in the '80's and '90's due to the cleaner properties of new oil, the reduced likelihood for in-vehicle contamination, and the minuscule potential for cross-contamination or adulteration during collection and processing. Simply put, given that there is nothing broken that requires fixing, EPA should exclude used motor oil from both its identification and area source proposals.

Given that it is legal for do-it-yourselfers to change their own oil in a manner that may result in soil, water, or air contamination, EPA has long recognized the importance of requiring proper used oil management while encouraging more used oil to enter into the legitimate recycling system. Thus, EPA crafted Part 279 to help reduce the hundreds of millions of gallons of used oil that are mismanaged by do-it-yourselfers each year.

For example, 40 CFR 279.23 allows used oil collected from motor vehicles brought in for service and from do-it-yourselfers to be burned in small on-site space heaters, recognizing both the efficacy of using motor oil as a fuel in on-site space heaters and the need to encourage the recycling of do-it-yourselfer oil. Many small business vehicle maintenance facilities recycle used motor oil as a space heater fuel, and in doing so they, Number one, reduce their reliance on

comparable petroleum-based fuels, achieving significant energy savings in the process; two, they reduce or eliminate the potential for off-site management liability; and three, they enhance the collection of do-it-yourselfer used oil.

Now, any unnecessary regulatory costs or burdens imposed on dealerships and other small business facilities recycling used motor oil, such as to the imposition of testing, recordkeeping, or incineration mandates, would decrease the amount of do-it-yourselfer oil brought into the legitimate used oil recycling system, resulting in increases in the amount of such oil poured on the soil, down the drains, or into trash barrels.

Response: Space heaters that are not boilers are not subject to the area source rule. The requirements most relevant to boilers fired by used oil are those for liquid-fired boilers. Small used-oil fired boilers will only be subject to a tune-up requirement. This should not disrupt normal operation of these boilers.

Commenter Name: Arlington Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0396

Comment Excerpt Number: 19

Comment: Question from Panelist] You said that you also supported off-spec off-site oil should be exempt as well; is that —

MR. GREENHAUS: Right. If you look at the regulations, I think that the citation is 279.12(c) — the regulations in 279 specifically talk about what you do with off-spec used oil. And the specifications were set back in the days when there were particular concerns for particular constituents.

And, by the way, I don't think too many of those that are in the specifications in 279 are the HAPs of concern that you seem to be focused on.

So, I would take a hard look at not only the specifications in 279 but also what's permissible with respect to -- by the way, also, off-spec oil is permissible to be processed in the on-site space heaters I was talking about.

Response: Space heaters that are not boilers are not subject to the area source rule. The requirements most relevant to boilers fired by used oil are those for liquid-fired boilers. Small used-oil fired boilers will only be subject to a tune-up requirement. This should not disrupt normal operation of these boilers.

Commenter Name: Los Angeles Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0397

Comment Excerpt Number: 41

Comment: The public's task of providing meaningful comments is complicated by EPA not settling the question of what is a solid waste under the RCRA first. We recommend EPA complete the Definition of Non-hazardous Secondary Material rulemaking first and then issue a Notice of Data Availability for the new preliminary floor units for public comment, and only at that point proceed with the other three Clean Air Act rules.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Fred T Simpson

Commenter Affiliation: Scotch and Gulf Lumber, LLC

Document Control Number: EPA-HQ-OAR-2006-0790-1061.1

Comment Excerpt Number: 3

Comment: EPA should finalize the non-hazardous solid waste definition rule first and re-propose the combustion rules based on the outcome of that rule.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Charles Thomas III

Commenter Affiliation: Shuqualak Lumber Co., Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-0609

Comment Excerpt Number: 3

Comment: The EPA should finalize the non-hazardous solid waste definition first and re-propose the combustion rules based on the outcome of that rule.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response

to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Charles Thomas III

Commenter Affiliation: Shuqualak Lumber Co., Inc.

Document Control Number: EPA-HQ-OAR-2006-0790-0609

Comment Excerpt Number: 5

Comment: The EPA needs to go back to the court and tell them that they have made a terrible mistake in setting these limits and ask the court to allow them to start over. If not, these rules will deal a blow to the American economy that will be unrecoverable. There is nothing wrong with ensuring that the air we all breathe is clean, but when you use skewed data to ensure this, it is wrong!

Response: See response to comment EPA-HQ-OAR-2002-0058-0397, excerpt 42 for discussion of economic impacts. Also see the preamble for discussion of impact analysis. See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for discussion of extension for the final rulemaking.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 54

Comment: I would just urge you to truly consider everyone's interest in this and not just economic interest for industry professionals. We don't vote for our lobbyists, for the lobbyists on Capitol Hill, and every other Capitol Hill in states, cities, and that sort of thing. So please take this semi-emotional testimony as an addendum to my vote to -- my vote of confidence in the government and your administration.

Response: See response to comment EPA-HQ-OAR-2002-0058-0397, excerpt 42 for discussion of economic impacts. Also see the preamble for discussion of impact analysis.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 60

Comment: We strongly encourage the Agency to ask the court for such time as it needs to finalize reasonable and well supported rules that do not impose unreasonable and unwarranted economic burden on the country.

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for discussion of extension for the final rulemaking. See response to comment EPA-HQ-OAR-2002-0058-0397, excerpt 42 for discussion of economic impacts. Also see the preamble for discussion of impact analysis.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 64

Comment: The public's task providing meaningful comments is complicated by EPA not settling -- settling the question of what is a "solid waste" under RCRA first. We recommend EPA complete the Definition of Non-Hazardous Secondary Materials rulemaking first and then issue a Notice of Data Availability for the new preliminary floor units for public comment, and only at that point proceed with the promulgation of the three Clean Air Act rules.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Houston Public Hearing Transcript

Commenter Affiliation: See transcript for detailed list of commenters

Document Control Number: EPA-HQ-OAR-2006-0790-0985

Comment Excerpt Number: 78

Comment: If EPA fails to adopt a standard in a timely fashion, or fails to adhere to the statute and the rule is overturned again, the public health benefits will be delayed and state and local agencies could be faced with the significant burden of developing MACT for several thousand permits on a case-by-case basis.

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for discussion of extension for the final rulemaking. See response to comment EPA-HQ-OAR-2002-0058-0397, excerpt 42 for discussion of economic impacts. Also see the preamble for discussion of impact analysis.

Commenter Name: Joe O'Rourke

Commenter Affiliation: F.H. Stoltze Land and Lumber Company
Document Control Number: EPA-HQ-OAR-2006-0790-1467.1
Comment Excerpt Number: 3

Comment: The EPA needs to petition the court for more time to finalize the new rules. That would give the EPA sufficient time to weigh all the comments that will be submitted during the comment period. These rules could have a devastating effect on industry and our country as a whole. Please take the time to examine all the implications and options and to make the correct decisions.

Response: See response to comment EPA-HQ-OAR-2002-0058-0397, excerpt 42 for discussion of economic impacts. Also see the preamble for discussion of impact analysis.

Commenter Name: Joe O'Rourke
Commenter Affiliation: F.H. Stoltze Land and Lumber Company
Document Control Number: EPA-HQ-OAR-2006-0790-1467.1
Comment Excerpt Number: 4

Comment: The EPA should exercise its discretion under section 112(d)(4) of the Clean Air Act to set health-based emission limits. Doing so would eliminate the need for additional controls where threshold pollutants are now low enough to be safe. We at Stoltze agree with AF&PA that the EPA should make the health threshold an integral part of its final rule.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Jim Hickman
Commenter Affiliation: Langdale Forest Product Company
Document Control Number: EPA-HQ-OAR-2006-0790-1379.1
Comment Excerpt Number: 4

Comment: EPA should retain a health-based compliance option so that facilities are not required to install unnecessary controls.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Jim Hickman

Commenter Affiliation: Langdale Forest Product Company
Document Control Number: EPA-HQ-OAR-2006-0790-1379.1
Comment Excerpt Number: 7

Comment: EPA should finalize the non-hazardous solid waste definition rule first, and then re-propose the combustion rules based on the outcome of that rule.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Steven D. Swanson
Commenter Affiliation: Swanson Group, Inc
Document Control Number: EPA-HQ-OAR-2006-0790-1241
Comment Excerpt Number: 7

Comment: We urge the agency to consider, as they mention in the proposal, that the rule should allow facilities to avoid installing controls where there is a reasonable case that emissions are safe.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Robert D. Bessette
Commenter Affiliation: Council of Industrial Boiler Owners, CIBO
Document Control Number: EPA-HQ-OAR-2006-0790-1783.1
Comment Excerpt Number: 1

Comment: As an overriding issue, CIBO believes EPA's current schedule, with promulgation by December 16, 2010 is wholly inadequate for the necessary evaluations, deliberations, and revisions that are needed to this proposed rule. This rule in combination with the three other proposed combustion rules presents the largest set of rulemakings from an impact and cost perspective that EPA has ever issued. As such, the cost and potential impact on jobs in the U.S. demand a thorough deliberation and thought process so that the most reasonable and defensible rule can be finalized that meets the intentions of the CAA. Requiring EPA to do all of the work required in less than four months puts EPA in an untenable position and the results of having too little time will be a less than optimum regulatory result. Therefore, CIBO recommends that EPA pursue at least six months additional time in preparation for promulgation of final Subpart DDDDD, Subpart JJJJJ, and Subpart CCCC and DDDD rules.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Susan Eckerly

Commenter Affiliation: National Federation of Independent Business, NFIB

Document Control Number: EPA-HQ-OAR-2006-0790-1631.1

Comment Excerpt Number: 2

Comment: NFIB has several concerns regarding the area source rule. Particularly troublesome is how economically burdensome this rule is despite the EPA having specific authority in Section 112 of the Clean Air Act to consider alternatives in situations where there are economic limitations. In particular, Section 112(d)(4) allows the EPA to set health-based standards for certain emissions. These health-based standards set a limit that is no more stringent or no less stringent than necessary.

In formulating Section 112(d)(4), Congress recognized that, "For some pollutants a MACT emissions limitation may be far more stringent than is necessary to protect public health and the environment." . [see pdf for footnotes] The intent of Congress is clear — standards should only be as stringent as they need to be. Instead, EPA has chosen an approach that is similar to using a sledgehammer to drive in a nail.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: James Happli, Jr

Commenter Affiliation: United Steel, Paper, Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union (Wausau Paper)

Document Control Number: EPA-HQ-OAR-2006-0790-1489.1

Comment Excerpt Number: 2

Comment: I also understand that the Clean Air Act allows the EPA to exempt boilers from some requirements if emissions from the boiler would not pose a risk to public health, but you did not include this exemption in the proposed new rule. Why not? If a boiler doesn't pose a risk to public health, why regulate it further?

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: George N. Clark

Commenter Affiliation: Manufacture Alabama

Document Control Number: EPA-HQ-OAR-2006-0790-1634.1

Comment Excerpt Number: 2

Comment: the proposed rule, EPA recognizes its authority under section 112(d)(4) of the Clean Air Act to set health-based emission limits as an alternative to the MACT standards if it determines that such limits adequately protect public health, including a margin of safety. This mechanism is intended to be used when MACT standards may be more stringent than is necessary to protect public health and the environment. The result would be a rule that is protective, but eliminates costs that are unnecessary.

The EPA should allow facilities to demonstrate that emissions of certain pollutants do not pose a public health concern. A practical health oriented standard for threshold pollutants like hydrogen chloride and manganese would allow sources to demonstrate their emissions of these compounds pose no adverse risk. The Clean Air Act in §112(d)(4), expressly contemplates the use of such an approach which can be implemented without sacrificing risk reduction benefits. We believe that provision reflects Congress' intent to provide for flexibility where there is not a public health threat. Testing at the fence line of a facility will target the investments where there is a health risk. EPA should make the health threshold standard an integral part of its final rule.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Joe Fierst

Commenter Affiliation: Wausau Paper

Document Control Number: EPA-HQ-OAR-2006-0790-1488.1

Comment Excerpt Number: 2

Comment: The Clean Air Act allows EPA to exempt boilers from some requirements if emissions from the boiler would not pose a risk to public health, but EPA did not include this exemption in the rule. Why not? If a boiler doesn't pose a risk to public health, why further regulate it?

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Ashley B. Peterson
Commenter Affiliation: American Meat Institute
Document Control Number: EPA-HQ-OAR-2006-0790-1486.1
Comment Excerpt Number: 3

Comment: EPA should allow facilities to demonstrate that emissions of certain pollutants do not pose a public health concern. A practical, health oriented standard for threshold pollutants would allow sources to demonstrate their emissions of these compounds pose no adverse risk. The Clean Air Act in §112(d)(4), expressly contemplates the use of such an approach, which can be implemented without sacrificing risk reduction benefits. A health threshold standard is critical to the future viability of biomass and other boiler fuels. EPA has indicated to stakeholders that this alternative will not be part of the proposed rule language. EPA should revisit this thinking and make the health threshold standard an integral part of its proposed Rules and allow an opportunity for public comment on this approach.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Jack H. Britt
Commenter Affiliation: Jack H. Britt Consulting
Document Control Number: EPA-HQ-OAR-2006-0790-1832
Comment Excerpt Number: 3

Comment: The best boiler systems available to day produce low levels of pollutants and biomass feedstock does not represent the risk of coal, which may contain significant quantities heavy metal. I believe that there are reasonable compromises that if adopted would protect public health, ensure cleaner air and at the same time promote renewable energy use in settings that would benefit the public.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Steven Jarvis
Commenter Affiliation: Missouri Forest Products Association
Document Control Number: EPA-HQ-OAR-2006-0790-1477.1
Comment Excerpt Number: 14

Comment: NESHAP rules are intended to control urban air toxics, but most biomass energy facilities are located in rural areas. Many forest products facilities were able to demonstrate under the very conservative health-based compliance option in the original Boiler MACT rule that their biomass boilers did not pose an adverse health “threat” to the surrounding population. The EPA should retain a health-based compliance option so that facilities are not required to install unnecessary controls due to the fact that the purpose of this rule is to control urban air toxics.

MFPA requests that the EPA exempt Major and Area Source Biomass Boilers located in non-urban areas from the emission restrictions based on the health-based compliance option in the original Boiler MACT rule.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Steven Jarvis

Commenter Affiliation: Missouri Forest Products Association

Document Control Number: EPA-HQ-OAR-2006-0790-1477.1

Comment Excerpt Number: 16

Comment: MFPA asserts that the EPA should finalize the non-hazardous solid waste definition rule first and re-propose the biomass combustion rules based on the outcome of that rule-making. The EPA should recognize that all forms of biomass used in boilers are fuel, not wastes.

Response: The agency’s time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: N/A

Commenter Affiliation: Sierra Club, Earth Justice, Clean Air Task Force, Natural Resources Defense Council

Document Control Number: EPA-HQ-OAR-2006-0790-1982.1

Comment Excerpt Number: 22

Comment: It bears emphasis that Congress did not authorize EPA to set work practice standards in lieu of emission standards whenever the agency viewed compliance costs as undesirable from a policy perspective. Rather, it allowed EPA to establish work practice standards only if economic limitations rendered the measurement of emissions “not practicable.” Congress’ decision to limit the availability of work practice standards must be respected. Congress required EPA to set emission standards at least as stringent as the floors regardless of cost. In attempting

to circumvent that requirement by setting work practice standards when it merely views costs as undesirable from a policy perspective, EPA contravenes the Clean Air Act and frustrates Congress' intent.

Response: Please see the preamble for discussion of EPA rational for setting work practice standards.

Commenter Name: Matthew Todd and David Friedman

Commenter Affiliation: American Petroleum Institute (API) and National Petrochemical and Refiners Association (NPRA)

Document Control Number: EPA-HQ-OAR-2006-0790-2025.1

Comment Excerpt Number: 1

Comment: These comments are based on the assumption that the concurrently proposed Definition of Nonhazardous Solid Waste (June 4, 2010 at 75 FR 31844) will be finalized as proposed. We have filed separate comments on that proposal. Should the final definition be substantially different from the proposal, EPA will need to reopen this rulemaking, the major source rulemaking and the CISWI rulemaking to allow for comments to reflect the significant impact of any such change on these three proposals.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: John P. Maultsby

Commenter Affiliation: Florida Plywoods, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1642.1

Comment Excerpt Number: 1

Comment: EPA should allow facilities to demonstrate that emissions of certain pollutants do not pose a public health concern. A practical health oriented standard for threshold pollutants like hydrogen chloride and manganese would allow sources to demonstrate their emissions of these compounds pose no adverse risk. The Clean Air Act in §112(d) (4), expressly contemplates the use of such an approach which can be implemented without sacrificing risk reduction benefits. A health threshold standard is critical to the future viability of biomass and other boilers. EPA should make the health threshold standard an integral part of its final rule.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Britt S. Fleming

Commenter Affiliation: Auto Goup

Document Control Number: EPA-HQ-OAR-2006-0790-1916.1

Comment Excerpt Number: 2

Comment: The Auto Group urges EPA to conclude the RCRA rulemaking prior to finalizing the Boiler MACT to avoid a repeat vacatur of the Boiler MACT should the solid waste definition rule be challenged and changed in such a way that the units covered by the Boiler MACT are impacted.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Marie Robinson

Commenter Affiliation: National Telecommunications Safety Panel

Document Control Number: EPA-HQ-OAR-2006-0790-1960.1

Comment Excerpt Number: 2

Comment: Based on such a limited data set, EPA is nonetheless proceeding to propose regulatory standards affecting an estimated 183,000 existing units at 91,300 area source facilities. In addition to proposing daily and monthly emission limits applicable to larger area sources, EPA is also making several determinations with regard to what controls are appropriate and available for all new coal, biomass and oil-fired units (regardless of size), what limits should apply to sources during periods of start-up, shutdown and malfunction, what monitoring requirements are applicable and how compliance must be demonstrated. Given the full range of regulatory determinations that EPA is making within the Area Source Boiler Rule, we believe that a more prudent course would be for the Agency to take sufficient time to gather relevant data. EPA must have sufficient data to underpin its final rulemaking; without such, Agency decisions on final requirements may be arbitrary and capricious.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Thomas A. Julia
Commenter Affiliation: Composite Panel Association
Document Control Number: EPA-HQ-OAR-2006-0790-1651.1
Comment Excerpt Number: 2

Comment: Incidental Use of Non-Hazardous Solid Waste Should Be Allowed

For all boilers and process heaters, EPA is proposing that facilities should maintain daily records of fuel use that demonstrate that they have burned no materials that are considered solid waste. See §63.7550. EPA is also proposing to require certification of the following statement on the compliance reports: “No secondary materials that are solid waste were combusted in any affected unit.” The requirement to certify that no solid waste was burned may not be feasible, as explained below.

CPA agrees with AF&PA’s separate comments on EPA’s waste identification rule explain that various secondary material streams that clearly constitute legitimate fuels will contain “incidental” materials that cannot practically be screened out, make no discernable difference to the environmental characteristics of the fuel stream, and either have fuel value or do not detract from fuel value. In those comments, AF&PA urged EPA, following long-established RCRA practice, to allow the burning of such incidental materials as part of the fuel stream that will inevitably contain them.

In addition, there is really no humanly possible way to prevent any discarded materials from finding their way into legitimate fuel streams. Someone at some time will throw oily rags, or waste paper, or a bandage, or earplugs, onto a bark pile or similar fuel storage facility, or a storm may blow small amounts of these materials onto a fuel storage pile.

Beyond such unavoidable events, there are also cases where it would make sense in terms of overall social policy to deliberately burn incidental materials in boilers without turning them into CISWI units. For example, the residues from cleaning up spills of nonhazardous materials, such as oil and hydraulic fluid, are often simply burned. So, on occasion, are scrubber residuals.

Response: The agency’s time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Bill Perdue
Commenter Affiliation: American Home Furnishings Alliance, AHFA
Document Control Number: EPA-HQ-OAR-2006-0790-1970.1
Comment Excerpt Number: 3

Comment: With regard to area source industrial boilers, EPA has not justified the need to impose numeric emissions limitations. Rather, EPA has ample authority and justification for establishing work practice standards for these small units. Were the Agency to decide,

nevertheless, to finalize numeric emissions limits, the proposed standards are not supported by the available data and must be substantially revised.

In situations where the use of GACT is authorized (as it is here), § 112(d)(5) authorizes EPA to establish “standards or requirements which provide for the use of generally available control technologies or management practices.” (Emphasis added). In other words, when setting standards based on GACT, EPA is expressly authorized to establish work practices instead of emissions limitations. There is no need under § 112(d)(5) for EPA to make a showing under § 112(h) in order to set work practice standards. This interpretation is supported by the legislative history of § 1121 and is reflected in numerous existing GACT standards. [See submittal for references]

Response: Please see the preamble for discussion of EPA rational for setting work practice standards. Under section 112(d)(4) of the Clean Air Act, the Administrator has discretionary authority to consider health oriented standard for threshold pollutants like hydrogen chloride and manganese. In the Boiler Area Source NESHAP, hydrogen chloride and manganese are not regulated under a MACT-based approach but under GACT-based approach.

Commenter Name: Thomas A. Julia

Commenter Affiliation: Composite Panel Association

Document Control Number: EPA-HQ-OAR-2006-0790-1651.1

Comment Excerpt Number: 3

Comment: It is true in rural areas where other disposal options are limited. CPA sees no reason to use CISWI to ban such useful practices.

Instead, EPA should amend its CISWI rule and its Boiler rules to provide that facilities could burn incidental amounts of waste without being classified as a CISWI unit. CPA believes such exclusion would be entirely proper. There is a presumption in favor of agency power to establish such an exclusion. That presumption tracks back to Judge Leventhal’s statement many years ago that unless Congress had been “extraordinarily rigid”, agencies had inherent power to exclude from regulation cases where the gain from regulation would be of “trivial or no value”. *Alabama Power Co. v. Costle*, 636 F.2d. 323, 360-61 (D.C. Cir. 1979).

It is true that the CISWI opinion said, 489 F.3d at 1260, that when Congress defined a “solid waste incineration unit” as a unit that burned “any” solid waste, see § CAA §129(g)(1), it meant “any” to mean “any”. However, the court did not address the question of whether EPA could establish an exclusion from any such literal reading that would allow incidental amounts of solid waste to be burned with legitimate fuels. The Clean Air Act case on which the court chiefly relied also stated most strongly that “any” meant “any” and then expressly said this did not preclude a de minimis exclusion. See *New York v. EPA*, 443 F.3d. 880, 888 (D.C. Cir. 2006). Moreover, the environmental petitioners in CISWI also expressly left this point open. See Brief for Environmental Petitioners at 6 (stating that “Environmental Petitioners express no view on whether EPA might be able to demonstrate on remand that [excluding a unit that sometimes

burns 1% solid waste from CISWI] meets this Court's standards for establishing de minimis administrative exclusions.")

Indeed, EPA has already in effect established such exclusions in its CISWI rules. For example, the medical incinerator rules do not cover household waste (see 40 CFR §60.51c definition of "medical infectious waste"). Similarly, the proposed CISWI rule itself does not literally follow the statute. While the statute calls for EPA to establish emission limits for "any facility" that combusts solid waste, EPA's proposal would apply only to any "commercial or industrial facility" that burns such material, see proposed §60.2265, 75 Fed. Reg. 31983.

Of course EPA acted entirely properly in thus proposing to exclude home stoves and fireplaces from regulation. Excluding from regulation de minimis amounts of materials burned in larger units would be no less proper.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimis size thresholds. The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Christian Richter and Jeff Hannapel

Commenter Affiliation: American Foundry Society

Document Control Number: EPA-HQ-OAR-2006-0790-1857.2

Comment Excerpt Number: 3

Comment: EPA MUST PROMULGATE THE NHSM RULE BEFORE THE BOILER GACT

This proposal was issued in conjunction with three other rules: the Industrial, Commercial and Institutional Boilers and Process Heaters rule for Major Sources (Boiler MACT), the Commercial and Industrial Solid Waste Incineration Units rule (CISWI), and the Identification of Non-Hazardous Secondary Materials that Are Solid Waste rule (NHSM). While these proposals are separate rulemakings, they are inter-twined and highly dependent on each other. In fact, the original Boiler MACT was vacated on grounds that EPA failed to identify which secondary materials are solid waste when combusted and subject to the Boiler MACT requirements. In response to the court action, EPA has now proposed all four of these rules at the same time.

AFS recognizes that EPA is bound by court-ordered deadlines for promulgation of these regulations. Nonetheless, as the court noted in vacating the original Boiler MACT rule, implementation of these rules depends on the final determination of which secondary materials must be managed as solid wastes. EPA should, therefore, finalize the NHSM rule before closing the comment period on the Boiler MACT, Boiler GACT and CISWI regulations.

Without that initial determination on which secondary materials are solid wastes, facilities would be unable to identify the applicable regulatory requirements for each affected unit. For example, whether the unit would be subject to the Boiler GACT provisions would depend on the regulatory status of the fuel or secondary material processed in the unit. As a result, it would be impossible for owner and operators to understand the effect of the rules on their facilities, to make economic decisions as to which fuels or other secondary materials to use, to install the appropriate pollution control equipment, and to conduct test burns in a timely manner.

EPA's failure to provide adequate notice of the regulatory requirements that are applicable to regulated units would prevent facilities from providing meaningful comments. Such a process oversight is a clear violation of the Administrative Procedure Act (APA) that governs EPA's rulemaking process. The court's finding that EPA's failure to address this fundamental issue was a fatal flaw for the original Boiler MACT rule provides further evidence that EPA needs to promulgate the NHSM rule before closing the comment period on the Boiler MACT, Boiler GACT and CISWI regulations.

EPA should, therefore, first establish the regulatory foundation for the Boiler MACT, Boiler GACT and CISWI rules and promulgate the NHSM rule that identifies the non-hazardous secondary materials that are solid wastes when combusted. Such an approach is consistent with the APA and would give an opportunity for adequate notice and comment. While this may necessitate an extension of the court-ordered deadline for these rules, it can avoid the unnecessary costs and time in challenging and overturning the Boiler MACT, Boiler GACT and CISWI rules on the same grounds that the original Boiler MACT was vacated.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Thomas A. Julia

Commenter Affiliation: Composite Panel Association

Document Control Number: EPA-HQ-OAR-2006-0790-1651.1

Comment Excerpt Number: 4

Comment: EPA's approach to RCRA regulation leads to the same result. Since RCRA regulation began EPA has allowed the handling and disposal of small amounts even of hazardous waste outside the RCRA system, since such an exclusion does not pose any environmental danger, while attempting to regulate such small amounts would lead to many regulatory absurdities. See generally 40 CFR 261.5 (authorizing the disposal of small quantities even of hazardous waste outside the hazardous waste regulatory system.) For all these reasons, CPA urges EPA to allow non-CISWI combustion units to burn up to 1% by weight non-hazardous solid waste without becoming CISWI units.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: William C. Scott
Commenter Affiliation: Collum's Lumber Products, LLC
Document Control Number: EPA-HQ-OAR-2006-0790-1796.1
Comment Excerpt Number: 4

Comment: EPA should retain a health-based compliance option so that facilities are not required to install unnecessary controls.

Response: This comment pertains to the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: David J. Prior
Commenter Affiliation: New York State Energy Research and Development Authority, NYSERDA
Document Control Number: EPA-HQ-OAR-2006-0790-1913.2
Comment Excerpt Number: 9

Comment: The proposed Area Source Boiler Rule with the exception of the CO requirement should only apply to (1) new and existing oil-fired boilers burning #4 fuel oil or #6 residual oil and (2) biomass with considerations for smaller units given below.

Response: See response to comment EPA-HQ-OAR-2006-0790-0838.1, excerpt 1 for discussion of de-minimus size thresholds.

Commenter Name: William C. Scott
Commenter Affiliation: Collum's Lumber Products, LLC
Document Control Number: EPA-HQ-OAR-2006-0790-1796.1
Comment Excerpt Number: 10

Comment: EPA should finalize the non-hazardous solid waste definition rule first, then re-purpose the combustion rules based on the outcome of that rule.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: James P. Brooks

Commenter Affiliation: Maine Department of Environmental Protection

Document Control Number: EPA-HQ-OAR-2006-0790-1915.1

Comment Excerpt Number: 12

Comment: Regardless of which pollutant EPA targets, we recommend that EPA establish consistent limits in the Area and Major Source Boiler MACTs. As currently proposed, EPA would establish more stringent CO limits for area sources than major sources. We believe this is inappropriate and inconsistent with EPA's approach to emission limitations for other source categories.

Response: The comment that limits for all pollutants must be based on MACT when a source category is listed pursuant to CAA 112(c)(6) is addressed in the preamble. Emission control levels vary between standards, even for the same type of boiler or incinerator, due to the need to base standards on an analysis of the "floor" for sources within a category. It is possible that standards may vary between the CAA section 129 rules and the area and major source NESHAPs.

Commenter Name: Jeffery S. Hannapel

Commenter Affiliation: National Association for Surface Finishing

Document Control Number: EPA-HQ-OAR-2006-0790-1840.1

Comment Excerpt Number: 12

Comment: This proposal was issued in conjunction with three other rules: the Industrial, Commercial and Institutional Boilers and Process Heaters rule for Major Sources (Boiler MACT), the Commercial and Industrial Solid Waste Incineration Units rule (CISWI), and the Identification of Non-Hazardous Secondary Materials that Are Solid Waste rule (NHSM). While these proposals are separate rulemakings, they are inter-twined and highly dependent on each other. In fact, the original Boiler MACT was vacated on grounds that EPA failed to identify which secondary materials are solid waste when combusted and subject to the Boiler MACT requirements. In response to the court action, EPA has now proposed all four of these rules at the same time.

EPA's failure to provide adequate notice of the regulatory requirements that are applicable to regulated units would prevent facilities from providing meaningful comments. Such a process oversight is a clear violation of the Administrative Procedure Act (APA) that governs EPA's rulemaking process. The court's finding that EPA's failure to address this fundamental issue was

a fatal flaw for the original Boiler MACT rule provides further evidence that EPA needs to promulgate the NHSM rule before closing the comment period on the Boiler MACT, Boiler GACT and CISWI regulations.

EPA should, therefore, first establish the regulatory foundation for the Boiler MACT, Boiler GACT and CISWI rules and promulgate the NHSM rule that identifies the non-hazardous secondary materials that are solid wastes when combusted. Such an approach is consistent with the APA and would give an opportunity for adequate notice and comment. While this may necessitate an extension of the court-ordered deadline for these rules, it can avoid the unnecessary costs and time in challenging and overturning the Boiler MACT, Boiler GACT and CISWI rules on the same grounds that the original Boiler MACT was vacated.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Jeffery S. Hannapel

Commenter Affiliation: National Association for Surface Finishing

Document Control Number: EPA-HQ-OAR-2006-0790-1840.1

Comment Excerpt Number: 13

Comment: NASF recognizes that EPA is bound by court-ordered deadlines for promulgation of these regulations. Nonetheless, as the court noted in vacating the original Boiler MACT rule, implementation of these rules depends on the final determination of which secondary materials must be managed as solid wastes. EPA should, therefore, finalize the NHSM rule before closing the comment period on the Boiler MACT, Boiler GACT and CISWI regulations.

Without that initial determination on which secondary materials are solid wastes, facilities would be unable to identify the applicable regulatory requirements for each affected unit. For example, whether the unit would be subject to the Boiler GACT provisions would depend on the regulatory status of the fuel or secondary material processed in the unit. As a result, it would be impossible for owner and operators to understand the effect of the rules on their facilities, to make economic decisions as to which fuels or other secondary materials to use, to install the appropriate pollution control equipment, and to conduct test burns in a timely manner.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Andrea Grant
Commenter Affiliation: Castle Oil Corporation
Document Control Number: EPA-HQ-OAR-2006-0790-1945.1
Comment Excerpt Number: 13

Comment: EPA has a long history of gathering and analyzing data on institutional, commercial and industrial boilers located at Major Sources. It first proposed the original Major Source MACT rulemaking in 2003. 68 Fed. Reg. 1660 (Jan. 13, 2003). Following the vacatur of the rule in 2007, EPA issued an information request to facilities previously covered by the MACT standard. The information request sought the following for each combustion unit at the facility: unit design, operation, air pollution control data, the fuels/materials burned, and available emissions test data, continuous emission monitoring (CEM) data, fuel/material analysis data, and permitted and regulatory emission limits. There was opportunity for EPA to consider and reassess its proposals in light of data obtained.

However, as discussed, the fuel oil industry does not believe that EPA's data compilations in preparation for the Major Source MACT rulemaking provide an accurate assessment of the smaller sources potentially affected by the proposed Area Source rule. Moreover, the potentially affected regulated community of Area Source boilers has not had sufficient time to understand fully what would be required of them — the obligations and attendant costs -- and to provide EPA with detailed analysis and recommendations. A corresponding effort by EPA to capture information on boilers operating at the types of facilities covered by the proposed rule would greatly benefit the rulemaking process.

Response: See preamble for discussion of the dataset used for MACT floor analysis, use of major source data, and inadequacy of data. See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for discussion of extension for the final rulemaking.

Commenter Name: Matthew Todd and David Friedman
Commenter Affiliation: American Petroleum Institute (API) and National Petrochemical and Refiners Association (NPRA)
Document Control Number: EPA-HQ-OAR-2006-0790-2025.1
Comment Excerpt Number: 19

Comment: Proposed 63.11194(d) specifies that "A boiler is a new affected source if you commenced fuel switching from natural gas to coal, biomass, or oil after June 4, 2010." "Fuel switching" is an undefined term. This could mean that a boiler would become a new source the first time it fired oil, even if there were no physical changes to the boiler to accommodate the oil firing or if the changes were less than reconstruction of the existing source. This proposed provision violates the CAA and must be deleted.

Under §112(a)(4) of the CAA a new source “means a stationary source the construction or reconstruction of which is commenced after the Administrator first proposes regulations under this section establishing an emission standard applicable to such source.” Thus a boiler can only become a new source by being constructed or reconstructed. The CAA does not permit an existing boiler to be made subject to new source requirements because it changes fuels, even if some modifications are needed to accommodate the change. A boiler that is part of an existing source on the date of publication of this proposal must, under the CAA, remain an existing source unless the existing source is reconstructed. Thus, proposed §63.11194(d) must not be finalized.

Response: See preamble for discussion of fuel switching and compliance.

Commenter Name: Paul Noe

Commenter Affiliation: American Forest and Paper Association, AF&PA

Document Control Number: EPA-HQ-OAR-2006-0790-1939.1

Comment Excerpt Number: 34

Comment: Particularly in the case of units where CO CEMS is required or is already installed, we are concerned that EPA is developing a standard for CO based on stack test data while requiring compliance based on a CO CEMS. It appears that EPA is using one method to set the standard and a totally different method to show compliance. The U.S. Court of Appeals for the D.C. Circuit has ruled that "a significant difference between techniques used by the Agency in arriving at standards, and requirements presently prescribed for determining compliance with standards, raises serious questions about the validity of the standard." *Portland Cement Ass'n v. Ruckelshaus*, supra, at 396. We believe that using stack test data to set the standards and then CEMS to show compliance qualifies as “a significant difference between techniques.” The primary difference between these two methods will be that the variability experienced during normal operations will not be captured during the stack test but will become apparent as the facility operates a CEMS over time.

Response: See preamble for discussion of CO CEMS and compliance.

Commenter Name: John C. deRuyter

Commenter Affiliation: DuPont

Document Control Number: EPA-HQ-OAR-2006-0790-1964.1

Comment Excerpt Number: 1

Comment: There are significant issues with the proposed rule. We believe part of the problem with these results is that EPA simply does not have enough time to properly develop appropriate standards. The sheer volume of data involved and trying to establish emission limits that are below the level of detection introduces complications and opportunities for error that may not have been addressed with prior rulemakings. EPA’s current schedule for final promulgation by

December 16, 2010 appears to be wholly inadequate to resolve the many serious issues with this proposed rule (as well as the Boiler/Process Heater Major Source MACT rule and CISWI). DuPont, therefore, recommends that EPA make arrangements to allow themselves at least 6 months additional time for promulgation of final rules. It is simply not appropriate to promulgate rules based on expediency rather than thoughtful deliberation.

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for discussion of extension for the final rulemaking.

Commenter Name: Edward J. Wilusz

Commenter Affiliation: Wisconsin Paper Council

Document Control Number: EPA-HQ-OAR-2006-0790-2133

Comment Excerpt Number: 5

Comment: In one fashion or another, EPA has been working on the Industrial Boiler MACT standards for better than 15 years and has known that it needs to set these standards since the 1990 Clean Air Act Amendments were enacted almost 20 years ago. Despite this long run-up to the proposed rule, the Agency has shockingly little data available to set the existing source standards. Tables 2 and 3 in the preamble tell the tale.

Using biomass-fired boilers as an example, Table 2 shows that the subcategory includes 420 sources, yet EPA has emissions testing data on 192 units for PM, 91 units for mercury, and 92 units for HCl – 46%, 22%, and 22% data availability, respectively. The numbers are far worse for many other pollutants and subcategories. The relative lack of data is a fundamental problem because EPA construes the statute as requiring it to set existing source MACT floors based on either the top performing 12% of sources for which it has data for the larger source categories and subcategories. Less data means the pool from which the top 12% is drawn is smaller and, therefore, the actual number of sources used to determine the MACT floor is smaller.

While it is true that the statute allows EPA to determine the MACT floor based on sources “for which the Administrator has emissions information,” this provision does not excuse EPA from using its resources and legal authority to obtain as much information as it reasonably can prior to setting MACT standards. In this case, EPA has had 15 to 20 years to gather the needed information. The fact that, at this point, data on only a small subset of sources in each subcategory is available represents an abdication of EPA’s responsibility and renders the resulting standards arbitrary and capricious.

Response: See preamble for discussion of the dataset used for MACT floor analysis, use of major source data, and inadequacy of data.

Commenter Name: Jim Simon

Commenter Affiliation: American Sugar Cane League

Document Control Number: EPA-HQ-OAR-2006-0790-2281.1

Comment Excerpt Number: 5

Comment: To the extent that the Proposed Rule regulates HAP or POM emissions pursuant to CAA 112(c)(3), it is promulgated in excess of statutory authority.

EPA may only regulate “sufficient categories or subcategories of area sources to ensure that area sources representing 90 percent of the area source emissions of the 30 hazardous air pollutants that present the greatest threat to public health in the largest number of urban areas are subject to regulation under this section.” 112(c)(3). An area source “means any stationary source of hazardous air pollutants that is not a major source.” 112(a)(2). By definition, area sources may be anywhere but, under CAA 112(c)(3), EPA may only regulate area source emissions from urban areas. In the Proposed Rule, EPA has not differentiated between urban and non-urban areas and thus regulates HAP emissions beyond urban areas.

The CAA does not define “urban areas.” However, EPA provides a definition in its Integrated Urban Strategy which implemented §112(c)(3). EPA utilized “metropolitan statistical areas with a population greater than 250,000 or for which more than 50 percent of the population has been designated as “urban” by the U.S. Census Bureau.” 64 Fed. Reg. 38711 (July 18, 1999). Nevertheless, the Proposed Rule regulates boilers regardless of whether or not they are located in “urban areas.” As a result, the Proposed Rule exceeds EPA’s statutory authority.

If Congress has directly spoken to the precise question at issue, that is the end of the matter. If Congress has not directly addressed the precise question at issue, and the statute is silent or ambiguous, then the question is whether the interpretation is a permissible construction of the statute. *Chevron U.S.A. v. NRDC*, 467 U.S. 837 (1984). Here, Congress has allowed area sources to be regulated only within urban areas. EPA’s attempt to regulate all area sources, wherever found, is not a permissible reading of the term “urban areas.” It expands the common sense meaning of the term and contradicts the definition utilized since 1990. Many of the mills are located in rural and non-urban areas.

Response: EPA thanks the commenter for their input. See the document “Review of Environmental Justice Impacts for the following Proposed Rules: Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration (CISWI) Units; National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers; National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters; and Identification of Non-hazardous Secondary Materials (NHSM) that are Solid Waste” that is located in the docket on how we addressed environmental justice.

Commenter Name: Jon Bolling

Commenter Affiliation: Prince of Wales Community Advisor Council

Document Control Number: EPA-HQ-OAR-2006-0790-1935.1

Comment Excerpt Number: 6

Comment: The area source regulation of hazardous air pollutants as part of this rulemaking should not apply to rural Alaska and should remain part of an urban-only effort

Rural Alaska biomass systems are not major sources of hazardous air pollutants. The area source provisions of this NESHAP rule are derived from the Integrated Urban Strategy of the National Air Toxics program promulgated in July of 1999. POWCAC does not believe it is appropriate to regulate rural stationary “area sources” under the auspices of a program designed to reduce HAP exposures to citizens residing in metropolitan areas (inventoried as greater than 250,000 people).

In the proposed NESHAP rule, EPA justifies regulating areas sources nationwide by pointing out boilers and process heaters exist nationwide. While POWCAC agrees rural stationary boilers are a source of carbon dioxide and particulates, we do not agree the NESHAP derived urban air toxics rule is the vehicle to regulate rural boilers. Rules to address areas sources in urban areas were developed because EPA recognized the sources and air toxics in urban areas are more varied and of a greater amount than in rural areas.

The promulgated rules were developed to address multi-factorial urban exposures. The rural Alaska biomass boilers are not major HAP sources, nor are they part of some extensive system of pollutants contributing to cancer incidence in cities. Rural areas, particularly remote areas such as rural Alaska, have a much different exposure scenario than urban areas and much different operating and compliance costs. EPA has identified up to 70 area source categories in urban areas. Alaska villages have only a handful of these sources. There is little industry in the villages, so most air pollution is a result of fuel storage, gasoline burned in vehicles, space heating, and power generation.

The cost to comply with these rules is much greater than in other parts of the country. Shipping to rural Alaska is expensive. Logistics are complicated and thus costly. Construction seasons are short and qualified personnel must be flown out and housed to install emission controls, or perform source tests. This would further exacerbate the already disproportionately higher cost of power in rural Alaska.

Reduction of fine particulate is already underway as Alaska’s rural villages install EPA approved boiler systems. Further, the state of Alaska is investing \$25 million a year in alternative and renewable energies. These projects include looking at expanding hydroelectric projects, or developing existing geothermal resources, and building interties to connect villages to larger and more efficient power sources.

Given the cost considerations of implementing these rules in rural Alaska and the questionable authority to implement the area source provisions in non-urban areas, we urge EPA to not promulgate the NESHAP area source provisions on rural Alaska.

Response: EPA thanks the commenter for their input. See the document “Review of Environmental Justice Impacts for the following Proposed Rules: Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and

Industrial Solid Waste Incineration (CISWI) Units; National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers; National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters; and Identification of Non-hazardous Secondary Materials (NHSM) that are Solid Waste” that is located in the docket on how we addressed environmental justice.

Commenter Name: Bill Thomas

Commenter Affiliation: Shuqualak Lumber Company

Document Control Number: EPA-HQ-OAR-2006-0790-1948.1

Comment Excerpt Number: 10

Comment: EPA should retain a health-based compliance option so that facilities are not required to install unnecessary controls if they present very low risk. This will allow EPA to target environmental investments where there is a real need.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: J. Michael Geers

Commenter Affiliation: Duke Energy

Document Control Number: EPA-HQ-OAR-2006-0790-1861.1

Comment Excerpt Number: 10

Comment: The proposed rule requires facilities to take costly steps to control emissions even though those emissions may not result in exposures which could pose an excess individual lifetime cancer risk greater than one in one million or exceed thresholds determined to provide an ample margin of safety for protecting public health and the environment. The EPA recognizes in the preamble to the proposed rule that the Administrator has the authority under section 112(d) to establish emissions standards other than conventional MACT standards, in cases where a less stringent emission standard will ensure that a health threshold will not be exceeded with an ample margin of safety. See 75 Fed. Reg. 32030. Duke Energy believes that the EPA should use the authority granted under section 112(d) to establish health based alternative emission standards for the Acid Gas HAPs as compliance option in the final ICI Boiler MACT rule. Section 112(d)(4) is designed to prevent the promulgation of unduly stringent emission limits simply for the sake of regulation. Section 112(d)(4) allows EPA to set health-based limits for certain HAPs based on established health thresholds, rather than having to follow the technology forcing provisions of 112(d)(3). As a practical matter, 112(d)(4) applies to non-carcinogenic HAPs [Footnote: Almost without exception, EPA assumes a linear, no-threshold dose-effect relationship for HAPs that are classified as carcinogens.] for which EPA has established a health threshold such as a reference concentration “RfC”) or a reference dose (“RfD”). EPA defines a reference concentration in its IRIS database as “[a]n estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure to the human population (including

sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime.”[Footnote: The definition for a reference dose is essentially the same except it focuses on exposures by pathways other than inhalation.] Thus, human exposures to a HAP at levels below its RfC are considered “safe” particularly given the uncertainty factors that EPA includes as part of its derivation of a RfC. Congress’ inclusion of 112(d)(4) in the 1990 CAA Amendments indicates an intent to retain the health endpoint of the original 112 -- protection of public health with an ample margin of safety. If the emissions of a given HAP from all sources in a source category are at a level where public health is protected with an ample margin of safety, then there is no practical need for or benefit from further regulation.

Duke Energy believes that in many cases, HAP emissions from industrial boilers will pose minimal risk to human health or the environment. Incorporating this option into the final rule would provide significant cost savings by foregoing the requirement for add-on controls on industrial boilers whose emissions do not exceed health benchmarks. At the same time, this mechanism would ensure that industrial boilers whose emissions do exceed these benchmarks are controlled. As a result, Duke Energy believes EPA can and should set health-based standards under 112(d)(4) when facts support its use.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Edward J. Wilusz

Commenter Affiliation: Wisconsin Paper Council

Document Control Number: EPA-HQ-OAR-2006-0790-2133

Comment Excerpt Number: 11

Comment: Along the same lines, the fact that EPA has not finalized the waste definition rule prior to asking for public comment on the Industrial Boiler MACT creates a fundamental procedural problem that is not solved by EPA’s alternative MACT proposal. While the waste definition proposal does set forth two basic approaches to distinguishing waste from fuel, the proposal also asks for comments on numerous specific elements of each of these approaches. [see pdf for footnotes] As a result, the proposal sets out a continuum of possible final rules rather than two distinctly different possibilities. This means that commenters on the proposed Industrial Boiler MACT have no way of knowing what population of units will qualify as boilers upon promulgation of the waste rule and, therefore, cannot conduct a meaningful review of the Industrial Boiler MACT emissions database with regard to the units that ultimately will be used to determine the MACT floors and MACT standards.

The inability to reasonably ascertain which units will actually be used in setting the final Industrial Boiler MACT standards prevents commenters from developing meaningful comments on the emissions database and on EPA’s manipulation of the data that ultimately will be used to set the standard. In short, EPA’s proposed rule effectively requires commenters to guess what data EPA will eventually use to set the standard. This violates EPA’s duty to provide a full and

fair opportunity to develop and submit comments on the proposal. This problem can only be cured by promulgating the waste rule and then proposing industrial boiler standards based on the units that are then known to be industrial boilers. Instead of using the UPL, EPA should use the upper tolerance limit (“UTL”), which is meant for use in situations where the available data does not represent the entire population. In addition, since the proposed 99% confidence interval is applied to all 5 HAPs, the combined probability of achieving the set of limits drops to 95%, which is inappropriately low when facilities must be in compliance 100% of the time. EPA therefore should use a 99.9% confidence limit for all standards.

Response: The agency’s time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards. Also see preamble for discussion of variability and MACT floor methodologies.

Commenter Name: Sarah E. Amick

Commenter Affiliation: Rubber Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1918.1

Comment Excerpt Number: 17

Comment: EPA should complete the “Identification of Non-Hazardous Secondary Materials that are Solid Waste” rule prior to completing the CISWI, Boiler MACT and Boiler GACT proposed rules. The fact that EPA has not finalized the non-hazardous solid waste definition rule prior to asking for public comment on the Industrial Boiler Area Source rule creates a fundamental procedural problem. The non-hazardous solid waste definition proposal sets forth two basic approaches to distinguish waste from fuel, and asks for comments on numerous elements of each of these approaches. As a result, the proposal sets out a continuum of possible final rules rather than two distinctly different possibilities. This means that commenter’s on the proposed Industrial Boiler Area Source rule have no way of knowing what population of units will qualify as boilers upon promulgation of the waste rule and, therefore, cannot conduct a meaningful review of the Industrial Boiler MACT emissions database with regard to the units that ultimately will be used to determine the MACT floors and MACT standards.

In short, EPA’s proposed rule effectively requires commenter’s to guess what data EPA will eventually use to set the standard. We believe this violates EPA’s duty to provide a full and fair opportunity to develop and submit comments on the proposal. This problem can only be cured by promulgating the waste rule and then proposing industrial boiler standards based on the units that are then known to be industrial boilers.

RMA submitted extensive comments on the NPRM “Identification of Non-Hazardous Materials That Are Solid Waste.” We incorporate the substance of these comments by reference. (See Attachment 1).

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: John T. Heard

Commenter Affiliation: Virginia Coal Association, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-2155.1

Comment Excerpt Number: 1

Comment: The recent world-wide recession and continuing economic difficulties have created extremely tough circumstances for the coal industry, manufacturers and other businesses in Virginia and the rest of the United States. These entities will be severely impacted by the proposed Industrial Boiler MACT rule standards and Area Source rule standards. As proposed, these standards are much more stringent than is necessary to assure protection of health and the environment from industrial boiler HAP emissions. The potential economic impact of these proposed regulations is also unacceptably severe. There are 92 boilers in Virginia alone that will be impacted by the proposed Boiler MACT regulations. Many of these belong to utilities or other entities that burn coal. The estimated cost of complying with the proposed Boiler MACT regulations in Virginia alone is \$930,000,000. Nationwide the cost of complying with the proposed Boiler MACT regulations is estimated to be in excess of \$18 billion. Consequently, the proposed Industrial Boiler MACT standards and Area Source rule standards must be extensively revised so that they are tailored to achieve health and environmental protection without requiring unnecessary expenditures of time and resources.

Response: See response to comment EPA-HQ-OAR-2002-0058-0397, excerpt 42 for discussion of economic impacts. Also see the preamble for discussion of impact analysis.

Commenter Name: Myra C. Reece

Commenter Affiliation: South Carolina Department of Health and Environmental Control

Document Control Number: EPA-HQ-OAR-2006-0790-1859.1

Comment Excerpt Number: 1

Comment: If there are significant changes to these proposed rules, we believe the EPA should renegotiate the promulgation deadline and republish the rules for comment.

South Carolina encourages the EPA to properly promulgate timely and Clean Air Act (CAA) compliant emission standards for the Area Source Boiler Rule. If the EPA fails to develop appropriate standards and the rule is vacated, public health and environmental benefits could be unnecessarily further delayed.

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for discussion of extension for the final rulemaking.

The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Christy Sammon

Commenter Affiliation: Southeastern Lumber Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1954.1

Comment Excerpt Number: 1

Comment: There are a number of issues with the major source and area source proposed rules that need to be addressed before the rules are promulgated. These issues are of such magnitude and importance that the rulemaking process should be suspended until these issues are addressed. The rules should then be re-proposed with adequate time to allow for a full public review and comment.

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for discussion of extension for the final rulemaking.

Commenter Name: Alice Edwards

Commenter Affiliation: Alaska Department of Environmental Conservation

Document Control Number: EPA-HQ-OAR-2006-0790-1926.1

Comment Excerpt Number: 1

Comment: ADEC is concerned that EPA may not have conducted extensive and thorough outreach throughout the country regarding the proposed rule. Alaskan sources do not appear to be fully aware of the consequences of the rule. ADEC has not seen the level of concern it would expect from potentially affected communities faced with significant new federal requirements. Given the broad scope of the rule's affected sources and the requirements to which they will be subject, the lack of awareness of the rule among Alaskan communities and affected sources concerns ADEC. ADEC recommends that EPA conduct further outreach to rural Alaska villages in particular before adopting a rule that affects virtually every clinic, school, community building, combined laundry/shower facility, etc., in these remote and often economically depressed communities.

Response: EPA thanks the commenter for their input. See the document "Review of Environmental Justice Impacts for the following Proposed Rules: Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and

Industrial Solid Waste Incineration (CISWI) Units; National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers; National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters; and Identification of Non-hazardous Secondary Materials (NHSM) that are Solid Waste” that is located in the docket on how we addressed environmental justice.

Commenter Name: John Donahue

Commenter Affiliation: Sappi Fine Paper North America

Document Control Number: EPA-HQ-OAR-2006-0790-2210.1

Comment Excerpt Number: 1

Comment: While the proposed rule for area source industrial boilers (“Area Source Rule”) includes a number of laudable provisions – most notably the proposal not to regulate gas-fired units – we have significant concern with the proposal because it would impose stringent numeric emissions limitations that would be difficult, if not impossible, to meet. We believe that EPA has not justified the need to impose numeric emissions limitations on area source industrial boilers and that ample authority and justification exists for establishing work practice standards for all area source boilers. Were the Agency to decide, nevertheless, to finalize numeric emissions limits, the proposed standards are not supported by the available data and would have to be substantially revised.

Response: See the preamble for discussion of EPA rationale for work practice standards.

Commenter Name: Lisa Jacobson

Commenter Affiliation: Business Council for Sustainable Energy

Document Control Number: EPA-HQ-OAR-2006-0790-1991.1

Comment Excerpt Number: 1

Comment: The BCSE continues to urge EPA to-where legally appropriate-consider the role that existing clean energy technologies and fuels can play in achieving the goals of Clean Air Act regulation.

Response: EPA thanks the commenter for their input.

Commenter Name: John Karakash

Commenter Affiliation: Resource Professionals Group, LLC

Document Control Number: EPA-HQ-OAR-2006-0790-2194

Comment Excerpt Number: 2

Comment: We urge that EPA, in partnership with USDA and USDOE, convene a public?private task force charged with the review of interrelated issues, all recognized as important to environmental protection, homeland security, and sustainable economic development.

It is clear that EPA must protect public health aspects of boiler operation, Yet any person who is fully informed about the effectiveness of efforts in Europe, Canada and even places like Viet Nam can see why public value can increase here by orders of magnitude with accelerated achievement of desired results if EPA were to take a more comprehensive approach than has been promulgated.

Multiple, interrelated and expensive environmental problems can be solved less expensively while making the benefits available to more individuals in many small and large communities in every state. The public?private task force can facilitate those results, multiplying public benefits and values through the synergies that come only through a committed and collaborative process involving all stakeholders.

A committed, collaborative process has been lacking. It is now relevant and in the public's interest to do so. I am willing [and can suggest others willing] to contribute in that process; one I believe would reduce the public's cost of protecting lives and property from wildfire and of mitigating climate change. The resultant benefits will: increase energy self?reliance and sustainable growth, benefit increased environmental biodiversity, improve small stream water quality, lower overall emissions, especially the release of VOC's and particulate matter.

In fact, it is difficult to understand how it is in the public interest to follow any policy that does not use a committed and collaborative process involving all stakeholders, to capture savings and improve results. Clearly a comprehensive effort offers the greatest opportunity for responsible public officials to avoid untold waste of public funds, natural resources and human capital. Please consider an approach to this critical issue by which all issues including public health can address all the interrelated issues pertaining to environmental protection, homeland security, and sustainable economic development.

Response: EPA thanks the commenter for their input.

Commenter Name: Richard Rosvold

Commenter Affiliation: Xcel Energy Services, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-2259.1

Comment Excerpt Number: 2

Comment: Xcel Energy supports the establishment of health-based emissions limitations. This option was available under the previous version of the major source industrial boiler maximum achievable control technology (MACT) standard. This option would allow agencies and facilities to target sources that truly have an impact on public health, while avoiding costly and unnecessary controls, testing, and monitoring on units that pose little risk to the public or the environment.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Patrick J. Medvecz

Commenter Affiliation: Wausau Paper Corp

Document Control Number: EPA-HQ-OAR-2006-0790-2283

Comment Excerpt Number: 2

Comment: The Clean Air Act allows EPA to exempt boilers from some requirements if emissions from the boiler would not pose a risk to public health, but EPA did not include this exemption in the rule. Why not? If a boiler doesn't pose a risk to public health, why further regulate it?

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Christopher S. Bond

Commenter Affiliation: Missouri, United States Senate

Document Control Number: EPA-HQ-OAR-2006-0790-2200.1

Comment Excerpt Number: 2

Comment: EPA proposes cumbersome and costly regulations for these clean biomass burning forest-product facilities that are more appropriate for boilers at industrial and chemical manufacturers or refiners. Similarly, EPA proposes regulations appropriate for incinerators burning scrap tires, plastics and solvents to apply also to forest-product producers using woody biomass byproduct to fuel their operations. In most all cases, EPA proposed emissions levels far exceed what is necessary to protect human health from biomass energy operations. Of course, we cannot compromise our goal of protecting human health. Therefore, the more common-sense solution is to use a health-based standard and allow facilities to show they are not endangering human health. That, after all, is the true goal of the Clean Air Act and is specifically authorized by that Act in section 112(d)(4).

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Christopher S. Colman
Commenter Affiliation: Hess Corp.
Document Control Number: EPA-HQ-OAR-2006-0790-2168.1
Comment Excerpt Number: 3

Comment: Any standards should apply per boiler, not total capacity at a site.

Response: See preamble for response to comments on the beyond the floor analysis.

Commenter Name: Dennis Vroman
Commenter Affiliation: United Steel Workers
Document Control Number: EPA-HQ-OAR-2006-0790-2209
Comment Excerpt Number: 3

Comment: I also understand that the Clean Air Act allows the EPA to exempt boilers from some requirements if emissions from the boiler would not pose a risk to public health, but you did not include this exemption in the proposed new rule. Why not? If a boiler doesn't pose a risk to public health, why regulate it further?

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Robert E. Cleaves
Commenter Affiliation: Biomass Powe Association
Document Control Number: EPA-HQ-OAR-2006-0790-1992.1
Comment Excerpt Number: 3

Comment: The proposal asks for comment on an approach that would allow facilities to demonstrate that emissions of certain pollutants do not pose a public health threat. We believe EPA has such flexibility under section 112(d)(4). We believe that provision reflects Congress' intent to provide for flexibility where there is not a public health threat. In such cases, it makes sense to allow that approach in the final rule for threshold substances such as hydrogen chloride and manganese.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Martin T. Booher
Commenter Affiliation: Ethan Allen Interiors, Inc
Document Control Number: EPA-HQ-OAR-2006-0790-1974.1
Comment Excerpt Number: 4

Comment: EPA should adopt an alternative to using CO emissions as a measure for boiler efficiency such as boiler operating training, at least with respect to biomass-fired boilers.

Response: Please see the preamble for changes to the requirements set forth by the final rule.

Commenter Name: Robert Thornton
Commenter Affiliation: International District Energy Association
Document Control Number: EPA-HQ-OAR-2006-0790-2169.1
Comment Excerpt Number: 4

Comment: Promulgation schedule is unreasonable and will not serve the public interest. IDEA believes EPA's current schedule, with promulgation by December 16, 2010 is inadequate for the necessary evaluations, deliberations, and revisions that are needed to this Proposed Rule. This rule in combination with the three other proposed combustion rules presents the largest set of rulemakings from an impact and cost perspective that EPA has ever issued. As such, the cost and potential impact on jobs in the US demand a thorough deliberation and thought process so that the most reasonable and defensible rule can be finalized that meets the intentions of the Clean Air Act. Requiring EPA to do all of the work required in less than 4 months puts EPA in an untenable position and the results of having too little time will be a less than optimum regulatory result.

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for discussion of extension for the final rulemaking. See response to comment EPA-HQ-OAR-2002-0058-0397, excerpt 42 for discussion of economic impacts. Also see the preamble for discussion of impact analysis.

Commenter Name: Lisa Jacobson
Commenter Affiliation: Business Council for Sustainable Energy
Document Control Number: EPA-HQ-OAR-2006-0790-1991.1
Comment Excerpt Number: 4

Comment: The Council has also long supported the development and use of output-based emissions standards as a means to reduce harmful emissions and encourages EPA to consider developing such standards for the Boiler NESHAP rules and in general. As EPA itself has noted, output-based standards that define allowable maximum emissions per unit of useful energy output can provide greater incentives for pollution prevention and emissions reductions than do traditional input-based standards that allow greater emission as more fuel is consumed.[

[Reference: "Output-Based Environmental Regulations Fact Sheet," EPA Combined Heat and Power Partnership (April 12, 2007). A copy is available at: <http://www.epa.gov/chp/state-policy/obrEfactsheet.html>.] The BCSE and others recognize the technical challenges inherent in measuring and defining useful thermal output from some sources addressed under the Boiler NESHAP rules, but urges EPA to consider developing output-based standards nonetheless as an effective means to encourage both increased energy efficiency and reductions in HAP emissions.

Response: Please see the preamble for changes to the requirements set forth by the final rule.

Commenter Name: Dan H. Williams

Commenter Affiliation: Sealed Air Corp

Document Control Number: EPA-HQ-OAR-2006-0790-2228.1

Comment Excerpt Number: 5

Comment: Federal MACT standards include provisions for “once in, always in.” This anti-backsliding provision for minor or area sources does not allow the facility to make changes in operations to avoid coverage under the standard. Area source MACTs should be excluded from the general provisions or the “once in” policy. Even if the facility removed all small boilers from the facility to comply with this rule, the proposed standard would mandate that the facility still report and document records in accordance with this rule indefinitely.

Response: See preamble for discussion of source categories that are affected by the rule.

Commenter Name: Al Hankins, Jr.

Commenter Affiliation: Hankins Lumber Company, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1841.1

Comment Excerpt Number: 6

Comment: We believe EPA should retain a health-based compliance option so that facilities are not required to install unnecessary controls if they present very low risk. This will allow EPA to target environmental investments where there is a real need.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Gailyn Messersmith

Commenter Affiliation: Messersmith Manufacturing, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1949.1

Comment Excerpt Number: 7

Comment: Conduct much more rigorous studies to establish or verify the following:

* The actual health effects of PM from biomass boilers vs. the assumed effects that are generated from combustion of petroleum products.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Fred Gordon

Commenter Affiliation: Herman Miller, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-2046.1

Comment Excerpt Number: 8

Comment: EPA should delay issuing the NESHAP standards until the Definition of Solid Waste rule is final.

EPA's parallel proposed rulemaking, "Identification of Non-Hazardous Secondary Materials That Are Solid Waste" will have a significant impact on the applicability of the NESHAP rule. Given that the solid waste definition is still under review, it is premature to issue the NESHAP rule that is based on data from sources that may or may not be included in the standard, pending issuance of the final rule defining what is a solid waste. The addition or removal of certain units from the NESHAP rule based on the solid waste definition could dramatically shift the baselines for the various NESHAP categories beyond that currently considered for this rulemaking. Until the solid waste definition issue is finalized, EPA should defer setting the NESHAP baselines.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Anna K. Chittum

Commenter Affiliation: American Council for an Energy-Efficient Economy

Document Control Number: EPA-HQ-OAR-2006-0790-2189.1

Comment Excerpt Number: 8

Comment: An output-based methodology is critically important to encourage combined heat and power (CHP), which produces thermal energy as well as electric power using less fuel than would be combusted in the separate generation of thermal energy and electric power. Input-based emissions regulations fail to credit CHP systems for their greater efficiency, reducing the incentive for CHP to be installed and used throughout U.S. industry. We encourage the EPA to

develop a reasonable methodology for addressing CHP units that recognizes the dual outputs of a CHP system, and thus their contributions to emissions reductions and increased efficiency.

Response: EPA thanks the commenter for their input. EPA has not implemented output-based methodology. EPA did not have the steam and efficiency data necessary to calculate output-based emissions.

Commenter Name: Pamela F. Faggert

Commenter Affiliation: Dominion

Document Control Number: EPA-HQ-OAR-2006-0790-2257.1

Comment Excerpt Number: 8

Comment: EPA has requested comments on whether it should impose a health-based standard under

§ 112(d)(4) for HCl and other acid gas emissions from industrial boilers. Section 112(d)(4) allows EPA to set health-based limits for certain HAPs based on established health thresholds, rather than having to follow the technology forcing provisions of § 112(d)(3). EPA should allow facilities to demonstrate that emissions of certain pollutants do not pose a public health concern. If the emissions of a given HAP from all sources in a source category are at a level where public health is protected with an ample margin of safety, then there is no practical need for or benefit from further regulation. EPA should set health-based standards under § 112(d)(4) when facts support its use. This would target environmental investments where there is a real need based on a rigorous demonstration that pollutants do not pose an adverse risk.

When the first Industrial Boiler MACT was promulgated in 2004, it included health based emissions limitations for two HAPs - HCl and manganese. While EPA acknowledges its authority under § 112(d)(4) to establish a health-based emissions limitation for threshold pollutants in lieu of a MACT emissions limitation, the Agency proposes not to establish any health based emissions limitations in this proposal. EPA should explain its decision to depart from the approach used in establishing health-based emissions limitations in the 2004 Industrial Boiler MACT.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Gailyn Messersmith

Commenter Affiliation: Messersmith Manufacturing, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-1949.1

Comment Excerpt Number: 9

Comment: Conduct much more rigorous studies to establish or verify the following:

* The actual health effects of biomass combustion in rural areas (where the vast majority of biomass boilers are) vs. the assumed urban areas that the EPA used in its health effect estimates.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: John T. Heard

Commenter Affiliation: Virginia Coal Association, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-2155.1

Comment Excerpt Number: 9

Comment: Along the same lines, the fact that EPA has not finalized the waste definition rule (see submittal for footnote 7). prior to asking for public comment on the Industrial Boiler MACT creates a fundamental procedural problem that is not solved by EPA's alternative MACT proposal.(see submittal for footnote 8). While the waste definition proposal does set forth two basic approaches to distinguishing waste from fuel, the proposal also asks for comments on numerous specific elements of each of these approaches.⁹ As a result, the proposal sets out a continuum of possible final rules rather than two distinctly different possibilities. This means that commenters on the proposed Industrial Boiler MACT have no way of knowing what population of units will qualify as boilers upon promulgation of the waste rule and, therefore, cannot conduct a meaningful review of the Industrial Boiler MACT emissions database with regard to the units that ultimately will be used to determine the MACT floors and MACT standards.

In short, EPA's proposed rule effectively requires commenters to guess what data EPA will eventually use to set the standard. This violates EPA's duty to provide a full and fair opportunity to develop and submit comments on the proposal. This problem can only be cured by promulgating the waste rule and then proposing industrial boiler standards based on the units that are then known to be industrial boilers.

Response: The agency's time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Richard Rosvold

Commenter Affiliation: Xcel Energy Services, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-2259.1

Comment Excerpt Number: 9

Comment: Annual stack testing is excessive, especially for liquid-fueled units with low hours of operation. In fact, for units burning distillate fuels, periodic stack testing would be of questionable utility. Instead, we suggest extending the work practice for periodic unit tune ups to boilers burning distillate oil and biodiesel fuels. This would ensure the units are operating optimally, leading to the desired environmental benefits, while sparing these units from the cost of testing.

Response: See preamble for rational on determining work practice standards.

Commenter Name: John T. Heard

Commenter Affiliation: Virginia Coal Association, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-2155.1

Comment Excerpt Number: 10

Comment: We urge EPA to defer final action on the proposed Boiler MACT and Area Source rules until the Agency has produced a cumulative impact assessment, as requested pursuant to the comments submitted by the National Mining Association. In addition, significant changes must be made to both proposed rules to correct fundamental technical and data issues that compromise the validity of the proposed standards. Changes are also needed to address several basic infirmities that call into question the legal viability of key aspects of the rules. Finally, the current condition of our nation's economy demands that EPA substantially rewrite the proposed rules in accordance with our comments in order to reduce their unnecessarily onerous burden on affected sources while still providing ample protection to health and the environment.

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for discussion of extension for the final rulemaking.

Commenter Name: Lee B. Zeugin

Commenter Affiliation: Utility Air Regulatory Group

Document Control Number: EPA-HQ-OAR-2006-0790-1957.1

Comment Excerpt Number: 10

Comment: The lesson for the upcoming EGU MACT rulemaking is that EPA must conduct a thorough analysis of the information it receives from its EGU ICR request. If more time is needed for EPA to perform its legally mandated obligations under the CAA, then it must ask the court to revise the rulemaking schedule.

Response: See response to comment EPA-HQ-OAR-2006-0790-0071.1, excerpt 1 for discussion of requests for discussion of extension for the final rulemaking.

Commenter Name: Ben Brandes

Commenter Affiliation: National Mining Association

Document Control Number: EPA-HQ-OAR-2006-0790-1980.1

Comment Excerpt Number: 11

Comment: Section 112(d)(4) authorizes EPA to set health-based emissions limitations when establishing standards for HAPs under § 112(d). Section 112(d)(4) is a powerful tool that enables EPA to match the stringency of a HAP emissions limitation to the level determined necessary to fully protect human health. As a result, the standard is no more stringent and no less stringent than needed to get the job done.

The default technology-based method of setting MACT standards is a cookie cutter approach that can and does result in HAP emissions limitations that are Draconian relative to what is needed to protect the public from HAP emissions. The clear purpose of § 112(d)(4) is to prevent this from happening. The legislative history of § 112(d)(4) is abundantly clear on this point. In formulating § 112(d)(4), Congress recognized that, "For some pollutants a MACT emissions limitation may be far more stringent than is necessary to protect public health and the environment. As a result, § 112(d)(4) was provided as an alternative standard setting mechanism for HAPs where health thresholds are well-established ... and the pollutant presents no risk of other adverse health effects, including cancer....

When the first Industrial Boiler MACT was promulgated in 2004, it included health-based emissions limitations for two HAPs – hydrogen chloride (HCl) and manganese. These health-based emissions limitations were rigorous standards that demanded accountability. They were a winner for the Agency and the public because public health would have been protected with an ample margin of safety. At the same time, these standards were a winner for affected sources because the standards would not have blindly required emissions to be reduced far below the levels needed to assure that the public was protected. It was estimated at the time that these health-based standards would have saved over \$2 billion in compliance costs, as compared to the technology-based standards that otherwise would have applied.

In the newly proposed Industrial Boiler MACT, EPA acknowledges its authority under § 112(d)(4) to establish a health-based emissions limitation for threshold pollutants in lieu of a MACT emissions limitation. However, the Agency proposes not to establish any health-based emissions limitations "[g]iven the limitations of the currently available information (i.e., the HAP mix where boilers are located, and the cumulative health impacts from co-located sources), the environmental effects of HCl, and the significant co-benefits of setting a conventional MACT standard for HCl. Nevertheless, EPA asks for comment on a wide range of issues related to the justification for setting health-based emissions limitations and the method by which they should be set.

Ample scientific information supports a determination that HCl, hydrogen fluoride, hydrogen cyanide, and manganese are threshold pollutants and, thus, are eligible to be regulated under § 112(d)(4). In addition, the Agency has the technical tools and significant factual support for establishing health-based emissions limitations for these HAPs that would provide the requisite ample margin of safety to health and the environment. Thus, health-based emissions limitations are fully justified on scientific and technical grounds. EPA should set health-based emission limitations for HAP acid gases and, as in the 2004 rule, a health-based emissions limit for manganese, which should be implemented in conjunction with a Total Select Metal (TSM) standard (where the TSM standard would be an alternative to the PM surrogate, and where a

?TSM less manganese option would be provided when a source elects to comply with the health-based compliance alternative for manganese).

From a legal standpoint, the statute makes clear that criteria pollutant co-benefits associated with the proposed MACT standards may not be considered in deciding whether to establish § 112(d)(4) health-based emissions limitations. Also, EPA has failed to explain why the health-based emissions limitations it established in the 2004 Industrial Boiler MACT and the justification provided for those limitations should now be reversed. The preamble to the newly proposed rule sets out a number of questions that might be relevant in deciding whether to establish health-based emissions limitations, but merely asking questions is not a sufficient basis for reversing prior determinations adopted through notice and comment rulemaking. Thus, EPA's proposal not to set health-based emissions limitations runs counter to the law and is based on an inadequate explanation of why the Agency proposes to depart from its prior approach. [Footnote 43, 44: S. Rep. No. 101-228 (1990) at 171. [Footnote 45: 75 FR 32032.]

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: Ben Brandes

Commenter Affiliation: National Mining Association

Document Control Number: EPA-HQ-OAR-2006-0790-1980.1

Comment Excerpt Number: 13

Comment: Along the same lines, the fact that EPA has not finalized the waste definition rule prior to asking for public comment on the Industrial Boiler MACT creates a fundamental procedural problem that is not solved by EPA's alternative MACT proposal. While the waste definition proposal does set forth two basic approaches to distinguishing waste from fuel, the proposal also asks for comments on numerous specific elements of each of these approaches. As a result, the proposal sets out a continuum of possible final rules rather than two distinctly different possibilities. This means that commenters on the proposed Industrial Boiler MACT have no way of knowing what population of units will qualify as boilers upon promulgation of the waste rule and, therefore, cannot conduct a meaningful review of the Industrial Boiler MACT emissions database with regard to the units that ultimately will be used to determine the MACT floors and MACT standards.

The inability to reasonably ascertain which units will actually be used in setting the final Industrial Boiler MACT standards prevents commenters from developing meaningful comments on the emissions database and on EPA's manipulation of the data that ultimately will be used to set the standard. In short, EPA's proposed rule effectively requires commenters to guess what data EPA will eventually use to set the standard. This violates EPA's duty to provide a full and fair opportunity to develop and submit comments on the proposal. This problem can only be cured by promulgating the waste rule and then proposing industrial boiler standards based on the units that are then known to be industrial boilers.

[Footnote 46: The waste definition rule is proposed at 75 Fed. Reg. 31844 (June 4, 2010).]

[Footnote 47: See, 75 FR 32035 (“Alternative Standard for Consideration”).]

[Footnote 48: See, e.g., id. at 31873 (“EPA is proposing that non-hazardous secondary materials used as fuels in combustion units that remain within the control of the generator and that meet legitimacy criteria specified in section VII.D.6 would not be solid wasteNevertheless, EPA is seeking comment on whether such secondary materials should be considered solid wastes and thus, be subject to the CAA section 129 requirements if combusted.”)]

Response: The agency’s time frame for promulgation of this rule, as well as the major source and CISWI rule, was mandated by court order. The solid waste definition rule, not subject to the court order, nevertheless was issued no later than the rules subject to the order. See response to comment EPA-HQ-OAR-2006-0790-1982.1, excerpt 1 for discussion of applicability between 112 and 129 standards.

Commenter Name: Charles B. Jones, III

Commenter Affiliation: Georgia Traditional Manufacturers Association

Document Control Number: EPA-HQ-OAR-2006-0790-1923.1

Comment Excerpt Number: 14

Comment: Reinstate the health-based compliance option at least for hydrochloric acid based on its limited toxicity. This again increases compliance flexibility and reduces costs for manufacturers.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.

Commenter Name: John Lyons

Commenter Affiliation: Kentucky Division for Air Quality

Document Control Number: EPA-HQ-OAR-2006-0790-2218.1

Comment Excerpt Number: 17

Comment: The Division recommends if a source is subject to this rule but in the future no longer operates the presently regulated boiler/process heater, then the rule would no longer apply and the source could opt out of the rule.

Response: See preamble for discussion of source categories are affected by the rule.

Commenter Name: Martin Lunde

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2065.1

Comment Excerpt Number: 17

Comment: Grand father existing equipment; it is literally impossible to retrofit dirty units. Establish a "Dollars for Smokers" or "Green for Clean" program to encourage the removal and replacement of dirty wood boilers (as was done in Montana for wood stoves).

Response: See preamble for discussion of source categories are affected by the rule.

Commenter Name: Dan H. Williams

Commenter Affiliation: Sealed Air Corp

Document Control Number: EPA-HQ-OAR-2006-0790-2228.1

Comment Excerpt Number: 17

Comment: The preamble to the standard inherently demonstrates that the EPA developed the rule knowing that the standard would just promote sources to shutdown or change fuels. Rather than basing limitations on technical data and risk-based analysis, the EPA is attempting to circumvent the requirements of the Clean Air Act and MACT programs to quickly pass a standard. Failure of the EPA to meet court ordered deadlines should not be justification for implementing such a sweeping and costly standard.

Sealed Air strongly objects to the adoption of this proposed rule. The agency should be required to scientifically defend all aspects of establishing emission limitations, work practices, rule applicability. For any operation to demonstrate compliance with the standard there must be some option other than shutting operations down – especially those operations that present no hazard to human health or the environment. This rule is too inclusive, expensive, and counter productive and is not an obvious improvement to current regulations.

Response: See preamble for discussion of the impact of the final rule.

Commenter Name: Martin Lunde

Commenter Affiliation: Citizen

Document Control Number: EPA-HQ-OAR-2006-0790-2065.1

Comment Excerpt Number: 18

Comment: In the Friday August 20, 2010 edition of the Minneapolis Tribune, Associated Press reporter Matthew Brown states that US Department of Energy records document that 30 traditional coal fired power plants (not clean coal technology facilities) were or are under construction since 2008. No matter how it is evaluated, coal is much dirtier than biomass. Focus control on coal fired power plants first. The overall efficiency of central power plants based on fuel input to end user is about 30%. Local biomass thermal energy, fuel to end user, is at least 60% to 75% efficient.

Response: See the preamble for discussion of impacts on the use of biomass and renewable energy.

Commenter Name: Barry Christensen
Commenter Affiliation: Occidental Chemical Corp
Document Control Number: EPA-HQ-OAR-2006-0790-2227.1
Comment Excerpt Number: 18

Comment: Health benefits of the rule should be based on HAP reductions. The benefits of the rule should include the monetized benefits from reductions in HAP and not be limited solely to reductions in criteria pollutant benefits such as PM_{2.5} and PM_{2.5} precursor (SO₂, and NO_x) reductions.

Response: See preamble for discussion of health benefits of the rule.

Commenter Name: Thompas P. Balf
Commenter Affiliation: Campus Cortium for Environmental Excellence
Document Control Number: EPA-HQ-OAR-2006-0790-1657.1
Comment Excerpt Number: 18

Comment: Our members are concerned that the proposed CO standards prescribed in this regulation do not adequately anticipate (or address) challenges associated with rising NO_x emissions or the installation of new control equipment on oil-fired boilers greater than 10MMBTU/hr. For example, on page 31917 of the Federal Register for this proposed standard the Agency states, "the EPA expects work practice standards such as boiler tune-ups and combustion controls such as new replacement burners will improve the efficiency of boilers." Our members are concerned that there may be New Source Review (NSR) ramifications for units that will be required to install new equipment such as new burners and/or control technologies for this regulation.

A brief discussion of possible NSR ramifications along with possible EPA/state contacts would be helpful.

Response: See preamble for discussion of changes to emission limits for CO.

Commenter Name: Lee B. Zeugin
Commenter Affiliation: Utility Air Regulatory Group
Document Control Number: EPA-HQ-OAR-2006-0790-1957.1
Comment Excerpt Number: 69

Comment: Given the limitations of the currently available information (the HAP mix where boilers are located, and the cumulative health impacts from collocated sources), the environmental effects of HCl, and the significant co-benefits of setting a conventional MACT standard for HCl, the Administrator is proposing not to exercise her discretion to use section 112(d)(4).¹⁹

Given the particular complexities of this source category (the location of boilers and process heaters near other significant sources of HAP emissions and the use of HCl as a surrogate for other HAPs), we solicit comment on all of the conclusions in this section, including the way the agency has used 112(d)(4) previously, and in particular whether to establish such a standard and, if so, the methodology by which it could be established.²⁰

We believe, perhaps because of the compartmentalization within EPA,²¹ the Agency has overlooked a fundamental issue with respect to its treatment of HCl and HF. To advance this argument, we quote the following sections from the Clean Air Act.

For the purpose of establishing national primary and secondary ambient air quality standards, the Administrator shall within 30 days after the date of enactment of the Clean Air Act Amendments of 1970 publish, and from time to time thereafter revise, a list which includes each air pollutant

- A. emissions of which, in his judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare;
- B. the presence of which in the ambient air results from numerous and diverse mobile or stationary sources.²²

Clearly HCl and HF would qualify as potential criteria pollutants (e.g., emitted by numerous and diverse sources). Notwithstanding section 112(d)(4), if the Administrator has any reason to believe the levels of either HCl or HF in the ambient air²³ reasonably endanger public health or welfare, she is derelict in her duties for failing to set a national ambient air quality standard (NAAQS). If we conclude the Administrator is not derelict in her duties, then the only logical conclusion to reach is that neither HCl nor HF concentration in the ambient air endanger public health or welfare. Thus, all of the Agency's tortured discussion about the difficulty of using the authority provided for in section 112(d)(4) is really unnecessary because neither HCl nor HF pose any health risks.

Response: EPA thanks the commenter for their input. See preamble for discussion of changes to emission limits for PM, CO and Hg. Also see preamble for discussion of where EPA determined work practice standards were appropriate.

Commenter Name: John T. Heard

Commenter Affiliation: Virginia Coal Association, Inc

Document Control Number: EPA-HQ-OAR-2006-0790-2155.1

Comment Excerpt Number: 2

Comment: Section 112(d)(4) authorizes EPA to set health-based emissions limitations when establishing standards for HAPs under § 112(d). Section 112(d)(4) is a powerful tool that enables EPA to match the stringency of a HAP emissions limitation to the level determined necessary to fully protect human health. As a result, the standard is no more stringent and no less stringent than needed to get the job done.

The default technology-based method of setting MACT standards is a cookie cutter approach that can and does result in HAP emissions limitations that go well beyond what is needed to protect the public from HAP emissions. The clear purpose of § 112(d)(4) is to prevent this from happening. The legislative history of § 112(d)(4) is abundantly clear on this point. In formulating § 112(d)(4), Congress recognized that, "For some pollutants a MACT emissions limitation may be far more stringent than is necessary to protect public health and the environment." I As a result, § 112(d)(4) was provided as an alternative standard setting mechanism for HAPs "where health thresholds are well-established and the pollutant presents no risk of other adverse health effects, including cancer..."(See submittal for footnote 2).

When the first Industrial Boiler MACT was promulgated in 2004, it included health based emissions limitations for two HAPs — hydrogen chloride ("HCl") and manganese. These health-based emissions limitations were rigorous standards that demanded accountability. They were a winner for the Agency and the public because public health would have been protected with an ample margin of safety. At the same time these standards were a winner for affected sources because the standards would not have blindly required emissions to be reduced far below the levels needed to assure that the public was protected. It was estimated at the time that these health based standards would have saved over \$2 billion in compliance costs, as compared to the technology-based standards that otherwise would have applied.

In the newly proposed Industrial Boiler MACT, EPA acknowledges its authority under § 112(d)(4) to establish a health-based emissions limitation for threshold pollutants in lieu of a MACT emissions limitation. However, the Agency proposes not to establish any health based emissions limitations "[Oven the limitations of the currently available information (i.e., the HAP mix where boilers are located, and the cumulative health impacts from co-located sources), the environmental effects of HCl, and the significant co-benefits of setting a conventional MACT standard for HCl." (see submittal for footnote 3) Nevertheless, EPA asks for comment on a wide range of issues related to the justification for setting health based emissions limitations and the method by which they should be set.

Ample scientific information supports a determination that HCl, hydrogen fluoride, hydrogen cyanide, and manganese are threshold pollutants and, thus, are eligible to be regulated under § 112(d)(4). In addition, the Agency has the technical tools and significant factual support for establishing health based emissions limitations for these HAPs that would provide the requisite ample margin of safety for health and the environment. Thus, health based emissions limitations are fully justified on scientific and technical grounds. EPA should set health based emission limitations for HAP acid gases and, like in the 2004 rule, a health based emissions limit for manganese, which should be implemented in conjunction with a Total Select Metal ("TSM") standard (where the TSM standard would be an alternative to the PM surrogate, and where a "TSM less manganese" option would be provided when a source elects to comply with the health based compliance alternative for manganese).

From a legal standpoint, the statute makes clear that criteria pollutant co-benefits associated with the proposed MACT standards may not be considered in deciding whether to establish § 112(d)(4) health based emissions limitations. Also, EPA has failed to explain why the health based emissions limitations it established in the 2004 Industrial Boiler MACT and the justification provided for those limitations should now be reversed. The preamble to the newly proposed rule sets out a number of questions that might be relevant in deciding whether to establish health based emissions limitations, but merely asking questions is not a sufficient basis for reversing prior determinations adopted through notice and comment rulemaking. Thus, EPA's proposal not to set health based emissions limitations runs counter to the law and is based on an inadequate explanation of why the Agency proposes to depart from its prior approach.

Response: This comment pertains to health based compliance alternatives and the major source boiler rulemaking. Provided the commenter has submitted this comment to the major source boiler rulemaking docket, the response to this comment will be provided there.
